United States

Circuit Court of Appeals

For the Minth Circuit.

2354

LYDELL PECK and ALLAN B. RUDDLE, 2007 Appellants, 2357

VS.

SHELL OIL COMPANY, INCORPORATED, a corporation, and SHELL DEVELOPMENT COMPANY, a corporation,

Appellees.

Transcript of Record

In Four Volumes

VOLUME III

Pages 997 to 1540

Upon Appeal from the District Court of the United States
for the Northern District of California,
Southern Division

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- Q. How many were made all together, Mr. Waller? A. Nine.
- Q. That is what I would assume. The third core made stuck to the core box because of dried materials from a previous mix; is that correct?
 - A. That is what the note says.
- Q. And the ninth core made, which is No. 8 on your list, also stuck? A. It stuck.
 - Q. You do not indicate why that one stuck.
 - A. No, there is no notation.
 - Q. Do you recall why? A. No, I don't.
- Q. Do you have any idea why that eighth one stuck?

 A. No.
- Q. Now, some time ago I asked you the question, In what percentage of cases, if you know, did cores made with Core-Min-Oil stick to the core box?
- A. I have no knowledge that would give you an answer to that. I never figured it out on a percentage basis or any other basis.
- Q. Do cores ever stick in a core box with linseed oil core mix? [656]
- A. So seldom as to be—I don't recall ever having seen one stick to the extent that the core maker threw it out. He might damage it some other way, but not by sticking.
- Q. How serious a problem is presented when a core sticks? All a core maker does is knock it out of the box and make a new core in there, doesn't he?
 - A. It is just about as serious as breaking an egg.

You no longer have an egg. You can't use a poor core.

- Q. However, in the case of a core-making problem, you can throw the core sand back in the box and start over again, can't you?
 - A. That is the usual procedure.
 - Q. Your sand is not lost to you? A. No.
- Q. Whereas, if you break an egg on Market Street, you would lose the egg entirely; you would have your core sand left if you spoiled the core and it stuck to the box?
- A. If you are not prepared to salvage eggs, I would say Yes, you lost it.
- Q. I wouldn't like to salvage an egg dropped on Market Street. What other difficulty did you encounter, if you can call it difficulty, relating to Core-Min-Oil cores?
- A. It had a definitely limited period of workability.
- Q. We discussed that to a limited extent this morning. Λ. That is correct.
- Q. I don't want to repeat, in other words, what we have gone through in the interests of time, so I will take for granted that we both have in mind what was discussed this morning. Are you able to add to that by telling me what the working life under ordinary conditions of temperature and humidity might be of a core sand made with Core-Min-Oil as compared with a core sand made with linseed oil?

- A. No, I don't recall any [657] comparative values that were ever worked out or that I ever had access to on that.
- Q. I believe you testified this morning the working life of a Core-Min-Oil core sand was increased if there was more moisture in the atmosphere or if the core sand was covered with a moist sack, or something of that sort; is that correct?
 - A. That is correct.
- Q. How long, if you know, is it necessary for a core sand to remain workable?
 - A. What kind of a core sand?
- Q. A core sand of any kind in a foundry; that is, one that has been mixed with a core oil.
- A. I have no knowledge of the exact length of workability, but it was noted as foundry procedure that they mixed up linseed oil and sand with the other component parts that made a core sand daily in the foundry while I was there. Whether it could have been mixed up and lasted longer, I don't know; I never asked.
- Q. Did you ever observe the making up of batches of linseed oil core sand twice daily, once when the shift came on in the morning and once when the shift came back after lunch?
 - A. I don't recall any division of that sort.
- Q. It might have occurred but you don't recall it?
- A. It might have, but I wasn't concerned particularly with their own procedure.

- Q. What was the longest working life that you observed in a Core-Min-Oil core sand?
 - A. Under what conditions?
- Q. Well, under any conditions. I asked you what the longest was that you observed, then I will ask vou what the conditions were when you observed it.
- A. I don't think I ever timed any. I know I never timed anv.
- Q. Then, have you any basis for saying that the working life of [658] a Core-Min-Oil core sand is less than a linseed oil core sand? A. Yes.
 - Q. What is that basis?
- A. The basis is my knowledge of emulsified asphalt, which disperses its moisture in the air and hardens as a result.
- Q. How long does it take emulsified asphalt to set in the air?
 - A. It all depends on your air conditions.
- Q. Well, under normal conditions of temperature and humidity where, we will say, that the humidity is forty per cent and the temperature is seventy degrees, what would be the setting time of asphalt emulsion?
- A. Have you reference to emulsified asphalt now mixed with a core sand?
- Q. No, just as stated a moment ago; just emulsified asphalt.
- Q. How thick, how large a mass of emulsified asphalt are you referring to? If it is in a can, it is

one thing; if it is painted very thin, it is another.

- Q. Then it makes a great deal of difference, doesn't it, as to how the emulsified asphalt is used?
 - A. Oh, it makes a tremendous difference.
- Q. If it were mixed into a core sand, that portion of the emulsified asphalt which was exposed to the air would be the part which was most inclined to harden or set up?
- A. It would volatilize faster if dispersed through sand than if it was in a dish.
 - Q. That might be true— A. It is true.
- Q. —and yet at the same time it is entirely possible that emulsified asphalt in the center of a large box of core sand might last several days, whereas that on the surface might last only several hours before it set up.

 A. That is right.
- Q. Now, I am trying to get some factor which you have used to [659] determine that the working life of a core sand made with Core-Min-Oil is less than sufficient for foundry practice. I would like to have you give me any help you can on that. It is possible that I have misunderstood you and you didn't mean any such thing, Mr. Waller. If so, correct me.
- A. Let's see. When this sand is placed on the core maker's table accessible to his requirements to fill his core box, it is exposed to the air, and my observation was that after exposure over average conditions—that is, average weather conditions, average foundry conditions,—that this sand stock

pile, if you choose to call it that, had a tendency to harden on the surface which was attributable to the evaporation of the water and the consequent setting up of the asphalt held in suspension in the emulsion.

- Q. Now, how long a period of time elapsed before that hardening was perceptible?
- A. Again, you would say under average conditions?
- Q. Under the conditions that you have described. Let us assume those conditions for this discussion. I understand that the conditions make all the difference in the world on this.
- A. I wouldn't put it in a matter of hours; I wouldn't put it in any period of time. It hardened more rapidly than linseed oil mixed core sand.
- Q. But does it harden objectionably in point of working time?
 - A. Yes, it becomes stickier when it hardens.
- Q. It depends entirely on how soon after the core sand mixed with Core-Min-Oil placed on the bench in the so-called stock pile is used, as to whether any hardening has occurred or not; is that correct?

 A. That is right.
- Q. Now, the thing I would like to learn, if it is possible, is [660] whether or not that hardening occurred in a core sand made with Core-Min-Oil with such a time element as to render it disadvantageous to the core maker.
 - A. Based on the only parallel that I have in the

way of observation, it has. The only parallel I have is the procedure at the Vulcan Foundry.

- Q. If I understand you, your observation was that at the Vulcan Foundry a batch of core sand mixed with linseed oil was made up at the start of the day's work and was drawn from for core making purposes progressively during the entire day and was workable at the end of the day as well as at the beginning; is that correct?
- A. That is correct; possibly a longer period than that.
- Q. Did you ever observe Core-Min-Oil sand made up under the same conditions?
 - A. Never.
- Q. You don't know, then, whether or not Core-Min-Oil sand would in fact act any differently over a period of a working day than linseed oil core sand, do you?
- A. It would be unnecessary to go through the routine procedure of mixing it up if you can prove your point by mixing it up in any way you want and placing it on the bench. The fact that it comes through at a different series of operations,—it is all the same when it gets to the bench: If it sets up on the bench one way, it will set up on the bench the other way.
- Q. Your statement, then, is based not upon observation but upon conclusion?
 - A. No; observation, definitely.

- Q. If I understood you correctly, Mr. Waller, you said a moment ago that you had never observed a batch of Core-Min-Oil core sand made up under parallel conditions to linseed oil core sand——
 - A. That is right.
- Q. —and placed in the bin and drawn from during the course of [661] a day's operations for the making of cores? A. That is right.
- Q. All you have observed is that if you take a quantity of Core-Min-Oil core sand and put it on the bench as a stock pile, that sooner or later that sand will tend to set up and become hard on the surface, and, therefore, as you have expressed it, unworkable?
- A. That is correct. I would say there is no difference who mixes it, whether you mix it or I mix it; it is subject to certain physical reactions in the presence of air—aeration—and on those factors alone it must be judged: Its physical constance.
- Q. Did you yourself ever observe a Cor-Min-Oil core sand made up, placed on the bench, and then see it set up in the manner that you have described?
 - A. Yes.
 - Q. At the Vulcan Foundry? A. Yes.
- Q. And how long a period of time elapsed from the time that the Core-Min-Oil sand was made until that setting up had taken place?
 - A. It might be different according to conditions.

- Q. I am asking you now about the time that you observed.
 - A. You want the time element involved?
 - Q. Yes. A. Two hours.
- Q. At the end of two hours, then, what did you observe?
- A. That there was a distinct and definite hardening on the surface of the mixed sand on the core maker's bench.
- Q. Did you sample the sand under the surface to determine if it was workable?
 - A. Oh, yes.
- Q. To what depth was the sand hardened at the end of two hours? Just the very surface?
 - A. It depends on what form it took. [662]
- Q. I am talking about this exact time that you observed; I want you to describe it.
- A. I wouldn't be prepared to say what depth by measurement, because I never measured it.
- Q. Did you ever break the surface and see how the sand was under the surface? A. Yes.
 - Q. You found it workable under the surface?
 - A. Yes, to a certain degree of workability.
- Q. Did you ever examine such a pile of sand at the end of, say, eight hours?

 A. Yes.
 - Q. And what did you observe then?
- A. There was an increasing and progressive hardening throughout the mass.
- Q. At the end of eight hours, to what depth had the hardening gone?

- A. I have never measured.
- Q. Well, can you give us any estimate at all on the depth?
- A. No, for this reason: that the sand must of necessity be uniform in consistency in order to make a core. If you have inconsistent sand on the top, the core makers have no more interest in it.
- Q. Did you ever see any attempts made to overcome this tendency of the core sand to set up in the presence of air?
 - A. Yes; it was covered.
 - Q. With a damp sack?
- A. Burlap sack, possibly dampened, I don't recall.
- Q. Did that tend to overcome this problem that you have described?
 - A. It probably did. It did.
- Q. It did. And I believe you testified, didn't you, that it was the practice to cover linseed oil core sands with a burlap sack on the bench?
- A. Not on the bench; in the storage bin where the core makers had their supply.
- Q. If it is ever left on the bench for any great length of time, [663] then it is covered there too, isn't it?
- A. They only brought up enough for their immediate use in the making and made repeated trips to their source of supply, which was adjacent to them.

- Q. At the source of supply it was covered?
- A. That was the bin where it was stored—the mixed sand was stored.
 - Q. And it was covered there?
 - A. It was covered there.
- Q. Now, you have discussed four problems which were encountered: CO₂ gas; the fact that you could not put the product in a single package or combination carton; that the product stuck; and this question of workability. What other difficulties did you observe in connection with Core-Min-Oil as a foundry product for the making of cores?
- A. There might have been others, but those four were sufficient to create a barrier.
 - Q. Do you recall any others?
- A. We couldn't use it in general foundry practice.
 - Q. Do you recall any others, Mr. Waller?
- A. That is the one I am speaking of: that we couldn't use it in general foundry practice on a culmination of all of these.
- Q. On account of all of these four conditions you couldn't use it in general foundry practice; is that your testimony?
- A. Yes; it didn't lend itself to the use in the Vulcan Foundry at that time, and the indirect, firing of the ovens was another thing it had, as we discussed this morning.
 - Q. That was what we discussed this morning.
 - A. That was the CO₂ gas.

- Q. They used direct fire ovens at Vulcan, didn't they?

 A. They used direct fire.
- Q. The only thing I think we have overlooked is—and I don't [664] know that you have an answer to this, but we will see: Why couldn't the product Core-Min-Oil be put up in one package; that is, the solution and the asphalt emulsion be mixed together and shipped in that form?
 - A. I don't know; I am not a chemist.
 - Q. That was a chemical problem, was it?
- A. It would seem to me that it would fall in that category.
- Q. How do you know that it couldn't be done? You indicated a few moments ago that it couldn't be done. Now I would like to know why you say that.
- A. I was informed that it was attempted at Emeryville.
- Q. You don't know that of your own knowledge?
 - A. I don't know about it of my own knowledge.
 - Q. Did you ever read any reports on that?
 - A. If I did, I don't recall them now.
- Q. Were you ever present at any discussions of such a problem?
 - A. Oh, yes, it was discussed.
- Q. As a matter of fact, that problem was discussed more or less continually between yourself, Mr. McSwain and others; isn't that true?

- Λ. Mr. Ruddle and Mr. Peck. It was a common——
- Q. That was your constant effort, as a matter of fact, in the Shell Company, was to try to find some method of marketing this product as a single combination; isn't that true?

Mr. Aurich: Just a minute. I don't want to object to that question as unfair. As far as this witness knows,—if you want to ask him.

Mr. Hackley: Yes, as far as you know.

- A. As far as I know, that was one of the things that we had to do.
 - Q. That was constantly before you?
 - A. Yes.
- Q. Now, you spoke here a while ago when we discussed this CO₂ gas problem, of the fact that it appeared to be solved by one [665] of two methods: Either the use of indirect fire oven such as an electric oven or a gas fire oven where the flame was not permitted to address itself to the chamber of the baking so that the gases of combustion would not enter the presence of the core, or by hooding the cores in some satisfactory way.

 A. No.
 - Q. And then you added——
- A. No, excuse me. I did not say that last mentioned word. Hooding the cores was not successful in a direct fired oven.
- Q. I may have misunderstood you. Would you tell me more about that. I thought I understood

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Plaintiff's Exhibit No. 37—(Continued)
(Deposition of Arthur C. Waller.)
you this morning to say that hooding the cores
did it.

- A. I said this morning that we attempted hooding the cores in order to exclude that gas, and in some cases it was successful, but in others not.
- Q. You mean under some methods of hooding it worked and under some methods of hooding it did not?
- A. In some cases the hooding of the cores in the direct fired oven produced successful cores from the standpoint of visual inspection and foundry classification, and in some cases it did not.
- Q. Under what circumstances were successful cores produced—satisfactory cores?
 - A. In the foundry?
 - Q. Yes, by hooding the cores.
- A. In the oven after the flame—direct flame—had been turned off and the latent heat of the oven walls was utilized to bake the cores.
- Q. As a matter of fact, under those conditions you could bake the core without hooding at all, couldn't you, without CO₂?
- A. Yes; it was unnecessary to hood a core under those circumsatnees.
- Q. Now, did you ever find any method of hooding the core in a direct fire oven that produced a satisfactory core?
- A. No, not that we could repeat it with any assurance of [666] success. We did it the same way that Mr. Ruddle had made successful cores in a

Plaintiff's Exhibit No. 37—(Continued) (Deposition of Arthur C. Waller.) direct fired oven without any hood at times; the same thing was true with us in the hooding.

- Q. You spoke of a hood this morning which was put over the core and raised a small distance from the base so that there was a space under the bottom of the hood.

 A. That is right.
- Q. Did that operate to produce a satisfactory core in a direct fire oven?
 - A. Sometimes it did and sometimes it didn't.
- Q. Under apparently identical conditions you had inconsistent results?
 - A. Under apparently identical conditions.
- Q. You got inconsistent results under apparently identical conditions? A. Yes.
- Q. Did you try any other methods of hooding than that one we have just described?
- A. No, I don't think of any. Although different mediums might have been utilized for the hood, in substance it was all the same.
- Q. You wouldn't say that there weren't other methods of hooding attempted which were perfectly satisfactory, would you?
- A. No hooding was proven satisfactory consistently.
 - Q. So far as you observed?
 - A. As far as I observed.
- Q. Did you describe any other method of hooding than the one where you raised the hood slightly off the base on which the cores were resting?

- A. Yes. Once we hooded some without raising them from the base.
 - Q. What results were obtained then?
- A. That prevented the escape of moisture and they did not bake.
- Q. You cured the gas problem but you did not get a core out of it; is that it?
 - A. That is right.
- Q. Did you ever observe any tests made with such a hood and the hood punctured to permit the escape of moisture? [667]
- A. We raised them slightly, as I mentioned previously, for that purpose, but any degree of raising or lowering was not to my knowledge experimented with.
- Q. Did you ever observe it where the hood was punctured at or about its top so the moisture might escape through a vent?
- A. Yes, the tin hoods were perforated on occasions for the purpose of permitting moisture to escape.
 - Q. What results were obtained then?
- A. I don't recall at the present time, but if it was any good we would have followed it.
- Q. You assume, therefore, because you did not follow it that therefore it was not satisfactory; is that correct?
- A. It isn't assumption; it is definitely a fact that we would have grasped at a method whereby we could get what we were seeking.

- Q. In the making of cores in a gas-free oven what percentage of cores, if any, were lost in the baking, do you know?
 - A. What do you mean by "lost"?
- Q. Failed to make satisfactory cores. And I am referring to Core-Min-Oil cores, you understand.
- A. Providing the core was correctly formed in the core box, I don't recall that we had any failures except those that were taken out prior to complete baking.
- Q. That was then due to an incomplete baking operation which was deliberate on the part, I suppose, of the experimentor; is that right?
- A. That is right. But at the same time, it was a failure of that type of core in an indirect oven.
- Q. What percentage of failures occur, if you know, in the manufacture of linseed oil cores?
 - A. I have no knowledge of that.
 - Q. You never made any study?
- A. I never heard any [668] percentage expressed.
 - Q. You never did?
- A. No. You are referring, I presume, to the baking of the core?
 - Q. Yes. A. That is right.
- Q. Now, did you ever note any failure of any of the Core-Min-Oil cores once they were baked in the proper manner as you have described in the making of castings therefrom?
 - A. Made in what oven?

- Q. In a gas-free oven.
- ' A. I don't recall any.
 - Q. Do you know what percentage of failures is expected in normal foundry practice in casting on linseed oil cores? A. No, I don't.
 - Q. You know that failures occur? A. Yes.
 - Q. A rather substantial number, but you don't know the percentage?
 - A. That is right.
 - Q. You know that there is a substantial number, however? A. Yes, there are.
 - Q. Are you familiar with foundry equipment, either as a result of your inspection of foundries or as a result of your study of the foundry art when you were assigned to this task, to the extent at least of stating whether or not there are any foundries that employ gas-free ovens?
 - A. No, I couldn't—I don't know of any data on that fact.
 - Q. You know that gas-free ovens are employed in foundries? A. Yes, I do.
 - Q. And you know that direct fire ovens are em-A. Yes. ployed in foundries?
 - Q. For example, are you familiar with the fact that the Chrysler Company has a recently constructed foundry, or a large foundry—I don't know how recently it was built—that cost some 125 [669] million dollars which employed entirely gas-free A. I didn't know that. electric ovens?
 - Q. Did you by any chance read the articles in

the Saturday Evening Post running here a couple of years ago dealing with the life of Walter P. Chrysler in which such a foundry was carefully described?

- A. No, I never saw the article, to my recollection.
- Q. You never mentioned that article to anybody or that particular fact to anyone?
 - A. I have no recollection of it.
- Q. Do you consider the Vulcan or the Macauley Foundries to be large foundries as foundries go?

 A. No, they are small job foundries.
- Q. Are there any large foundries as foundries go on the Pacific Coast, so far as you know?
 - A. I have never visited any.
- Q. Have you ever visited any foundries at all except Vulcan and Macauley?
- A. Yes, I visited a foundry over here on Mission Street.
 - Q. Kingwell?
 - A. I don't recall the name.
 - Q. With whom? A. Mr. McSwain.
 - Q. Is that the Pacific Foundry?
 - A. I couldn't say.
- Q. During the time that you were assigned exclusively to the problem of Core-Min-Oil you made every effort, I assume, very carefully and conscientiously to follow all the work that was being done where you were present and to observe it?

- A. I wouldn't say all the work that was done. I took notes.
- Q. You took notes wherever you were of whatever was being done in your presence?
 - A. Not always.
 - Q. A good proportion of the time?
 - A. Possibly. [670]
 - Q. What was the nature of your notes?
- A. They described the work, the particular experimental work that was being undertaken at that particular time.
- Q. Did you make notes at the Vulcan Foundry when core mixes were being made and cores were being made and castings were being made from the cores?
- A. Sometimes I did and sometimes I didn't. It wasn't regular procedure on my part.
- Q. There were many occasions when you did make such notes?
- A. There were a few occasions when I did make them.
- Q. What did those notes comprise? Did you make notes of each step of the procedure and the quantities that were taken, the manner in which the mix was made, and things of that sort?
 - A. They were largely similar to Exhibit 1.
 - Q. Substantially detailed notes, in other words?
- A. I wouldn't call that very elaborate notes. That is a casual note.
 - Q. The other notes you made were much more

detailed than these Exhibit 1 notes, weren't they?

- A. Yes, I made notes more detailed than that.
- Q. Did you make observations of temperature at the plant when experiments were being carried on?
- A. Not with instruments. I mean by that, I had no thermometer.
 - Q. Did you make any note on temperature?
- A. I would say cloudy, rainy, clear, in generalities of that sort.
 - Q. Hot, and not so hot, and so forth?
 - A. That is right.
 - Q. You had no instruments available, I take it?
- A. No, the only thermometers we had were those in the electric oven over there.
 - Q. Did you make notes of oven temperatures?
 - A. Of baking temperatures? [671]
 - Q. Yes. A. Yes.
- Q. And you made notes of the time that it took to bake satisfactory cores with Core-Min-Oil mixes?
 - A. I took notes of baking times.
- Q. Do you recall how long it took to bake a core for a two-inch Merco Nordstrom valve made with Core-Min-Oil?
- A. In what? In the electric oven or in the gasfired oven?
 - Q. Let us take in an indirect fire oven.
- A. All right. No, I couldn't—I took notes, but I couldn't tell you now.

- Q. Did you ever observe linseed oil cores bake in an indirect fire oven?
 - A. I think I have.
- Q. Did you ever observe the comparative baking times of like linseed oil cores as against like Core-Min-Oil cores? A. Yes, I did.
 - Q. What were the relative comparisons?
 - A. I don't recall.
 - Q. Well, which one took the longer to bake?
 - A. I don't recall at the present time.
- Q. You have no recollection on that, Mr. Waller?
- A. I think on thin cores there was a difference. The ratio was not the same. As the size of the diameter of the volume of the core increased, the time was not in direct proportion, as I recall it.
- Q. The time element came closer and closer together?
- A. There was a difference. What would be true in the case of a two-inch core would not necessarily be true of twice that dimension, a four-inch core.
- Q. However, in any case it is true, is it not, that the Core-Min-Oil core baked faster than the linseed oil core?
- A. I couldn't say from my own knowledge that such is the case. [672] If you want me to guess, I would say Yes, we did find differences in favor of the Core-Min-Oil small baked cores as far as the time element was concerned.

- Q. And that difference, as I understand you, got progressively less as the size of core increased?
 - A. That is right.
- Q. Did you ever reach a point, as you remember it, where the baking time of the Core-Min-Oil core was greater than the linseed oil core?
- A. My work did not carry through to the experimentation with various sized cores in the baking.
- Q. You have described the fact that you took notes. I understand you took notes out at the Vulcan Foundry? A. That is right.
- Q. You took notes up at Martinez, I suppose, at least on some occasions?
- A. Most of the notes were recorded by the staff there, though I may have at that time made notes myself.
- Q. I suppose you took notes out at the Macauley Foundry?
- A. No, I don't recall making any notes there, unless it was to simply familiarize myself with foundry terminology.
- Q. Did you make any notes at any of the conferences at which Mr. Ruddle or Mr. Peck were present?
- A. No, I don't recall making any notes of conversations or at meetings.
- Q. Do you remember making any notes of any conferences of any kind relating to Core-Min-Oil?
 - A. No.

- Q. Did you prepare any confirming memoranda on your conferences with Mr. McSwain, Mr. Spotswood, Dr. Tuemmler or anybody else at any time?
 - A. No.
- Q. Do you recall any reports to anyone in connection with the work that you were carrying on in connection with Core-Min-Oil?
- A. This Exhibit No. 2 is the only one that I can recall now of having made. [673]
- Q. Do I understand that all of your other reports were oral? A. That is right.
 - Q. To whom?
 - A. Mr. McSwain or Mr. Harsch.
 - Q. Anyone else?
 - A. I didn't report to anybody else.
- Q. Did you ever discuss Core-Min-Oil with any member of the patent department of the Shell Oil Company?

 A. No.
 - Q. Mr. Gratama?
- A. I don't recall it. I know Mr. Gratama, but I don't recall discussing this with him.
 - Q. Mr. Zublin? A. No.
 - Q. Mr. Burch? A. No.
- Q. Outside of discussing Core-Min-Oil with Mr. Harsch, Mr. McSwain, Mr. Spotswood, Dr. Tuemmler, and possibly some of Mr. Spotswood's assistants up at Martinez, did you discuss Core-Min-Oil with any other employee of the Shell Oil Company at any time?

- A. It might have been so. There are a lot of employees there.
- Q. I will stipulate to that. Do you have any specific conversations in mind? A. No.
 - Q. Anyone specifically that you talked to?
- A. No, whatever it would be would be in the nature of casual conversation.
- Q. What became of these notes that you have described after you made them, Mr. Waller?
- A. When I left for Seattle in the fall of 1938 they were thrown out along with other cleaning out of my desk, as they appeared to have no further value to me.
 - Q. Thrown out where?
 - A. Destroyed—scrap basket.
 - Q. Thrown in the waste basket?
 - A. That is correct.
 - Q. All of your notes?
- A. What I hadn't thrown away previously. Sometimes I kept those notes for only a little while, and they had no more significance and I cast them out. I didn't keep them all until one time. [674]
- Q. Then I understand that you threw away all of the notes you ever made in connection with Core-Min-Oil exhibit—Exhibit 1 and Exhibit 2 which you have produced here today?
 - A. That is all I know of that remain.
- Q. Do you remember throwing away all the others but those two?

 A. I just said I did.

- Q. Where did you get these notes, Exhibits 1 and 2? A. Where did I get these?
- Q. Yes, today. How did you happen to get them here today?
 - A. You pushed them across to me.
 - Q. Your counsel handed them to me.

Mr. Hackley: If you want to make a statement on that, Mr. Aurich, proceed.

Mr. Aurich: I only wanted to make this observation, Mr. Hackley; that these two notes, Exhibits 1 and 2, were obtained from the files of the Shell Company here in San Francisco, and these two notes were not in Mr. Waller's possession, and he didn't bring them, incidentally.

Mr. Hackley: That is what I understood. As a matter of fact, you showed me both sets of notes, but inasmuch as it was a month or more ago—

Mr. Aurich: That is right.

The Witness: I'm sorry; I misunderstood your question.

Mr. Hackley: That is all right.

Mr. Aurich: Incidentally, Mr. Hackley, I believe it was Mr. Harsch—I am not positive about this—asked me to be sure that Mr. Waller was advised to look for whatever notes he may have in Seattle.

Mr. Hackley: Yes.

Mr. Aurich: And you can question him about that if you want. [675]

Mr. Hackley: I was going to.

Mr. Aurich: I understand that a letter was sent to him telling him specifically to look for any notes he may have, and that he has informed me that such a search has been made and he has been unable to find any.

Mr. Hackley: Q. In addition to the notes which you have described, Mr. Waller,—and which were kept more or less in your desk, I take it, at your office, while you were in the San Francisco division,—did you keep a separate notebook or notebooks which you kept as your personal property either at your home or elsewhere?

- A. No, I have no such record.
- Q. You never said to Mr. Peck or Mr. Ruddle that you were keeping a separate notebook on this whole transaction?

 A. No.
 - Q. And you never kept such a notebook?
 - A. I never kept such a notebook.
- Q. Did you ever take any of the notes relating to this CoreMin-Oil subject to Seattle?
 - A. Not to my recollection.
- Q. Did you make any search for any notes or records, memoranda of any kind, relating to Core-Min-Oil in your files at Seattle or in your home at Seattle before you came here today?
- A. Yes, I did. I have a folder marked "Core-Min-Oil" in my desk, and I looked through that to be certain, in response to the request in the letter, to see if there was anything there that could be classed as data or notes. There was nothing.

- Q. Where is that file?
- A. That is in my desk at Seattle.
- Q. Why didn't you bring it here today?
- A. It has no bearing whatever; it consists of photostated articles on foundry procedure from magazines; no notes whatever.
- Q. What was the history of those photostatic articles? Were those things that you accumulated during the time that you were [676] working on Core-Min-Oil?
- A. They were articles that I wanted to familiarize myself with as a means of learning something more about foundry procedure. I believe that the photostats were made at the company office.
- Q. Back in the period when you were working on Core-Min-Oil?
- A. Either that, or else Mr. Peck or Mr. Ruddle gave us some articles—printed articles—on foundry procedure. [677]
- Q. Going back to the question of the work there at Macauley's, do you remember that when you went over there the first time that Mr. Ruddle and the core maker there made up a batch of core sand using Core-Min-Oil, or what Mr. Ruddle said was Core-Min-Oil; that some cores were made out of that, some castings were poured; after the cores were baked that very first time that the next day you went back and examined the castings made with those cores?
 - A. No, that isn't my recollection. I was so new,

so unversed in anything pertaining to any foundry, that the significance of who made what and what it was made of was utterly lost to me.

- Q. That might have occurred, then, and it might have been lost on you; is that right?
 - A. It might have, very easily.
 - Q. You wouldn't say that it hadn't happened?

 [679]
- A. No, I wouldn't. I don't recall any continuity to it.
- Q. Do you remember meeting, along with Mr. Ruddle and Mr. McSwain and perhaps others, meeting Mr. Spotswood at the Macauley Foundry?
 - A. At that first trip?
 - Q. No, one of those early occasions.
- A. It is possible. It has no significance that stamps it in my memory—in my recollection.
- Q. The first time you definitely remember Mr. Spotswood was when you went up to Martinez; is that correct? A. That is right.
- Q. But you wouldn't exclude the possibility that Mr. Spotswood met you and others down at the Macauley Foundry?
- A. Let me set something straight there. That wasn't my first meeting with Mr. Spotswood. I knew him as a member of the organization before that.
 - Q. I mean in connection with Core-Min-Oil.
- A. That is right. At Martinez is where I first had anything to do with him regarding Core-Min.

- Q. It is possible that you did meet him at the Macauley Foundry even before you met him at Martinez in connection with Core-Min-Oil?
 - A. It is a physical possibility.
 - Q. You just don't have any recollection of it?
 - A. No, I have no recollection of it.
- Q. Do you remember telling Mr. Ruddle that the foundrymen at the Vulcan Foundry had told you that the loss of castings with linseed oil ran as high as twenty-five and thirty per cent, or as a matter of fact, ran in the neighborhood of twenty-five and thirty per cent?
- A. No, I don't recall that specifically there. It might have been a certain time on a certain job where they had a high loss which was repeated to me and I [680] in turn repeated it to Mr. Ruddle, but I don't recall it. That was something that was very much talked about but had very little substantiation: the percentage of lost castings.
- Q. Scientifically you never made any determination of exact percentages of losses?
 - A. No.
- Q. Although the core men in the Vulcan Foundry reported that easting loss with linseed oil cores was a regular occurrence?
- A. No, I wouldn't say that the core men did. It was more likely the pouring men.
- Q. I should say pouring men. I am probably using the wrong term there. They did indicate to you——

- A. They didn't have to tell you; all you had to do was to walk around the foundry and see the discarded castings which went back to the furnace for breaking up and remelting—defectives.
- Q. Do you remember ever saying in substance to Mr. Ruddle here that you personally were very proud to be associated with him in the development of Core-Min-Oil; that you felt it might revolutionize the whole foundry industry—words to that effect?
- A. No, I don't recall specifically that statement. I was interested in my work. It had a goal ahead of it which was an incentive, and, frankly, I was always interested in it—in the possibilities. I don't recall making specific mention of that to Mr. Ruddle.
- Q. Do you remember stating to Mr. Ruddle,—and perhaps to Mr. Peck as well—after the cause of softening of the cores in the presence of CO₂ gas had been isolated, that Core-Min-Oil was now ready for the market?
 - A. No, I don't recall saying that.
- Q. Do you remember stating to Mr. Ruddle that Harry Leas at the Vulcan Foundry had asked you when he could get a shipment [681] of Core-Min-Oil for commercial use in the foundry?
- A. I remember that subject was brought up. I recall that that subject was brought up at some time and discussion was entered into as to the possibilities of supplying that medium, but it was non-

Plaintiff's Exhibit No. 37—(Continued) (Deposition of Arthur C. Waller.) conclusive; it wasn't anything more than an effort to find out if such-and-such a thing arrived we could expect to get this material in quantity.

- Q. And what was the conclusion?
- A. The "if"?
- Q. What was the conclusion?
- A. The conclusion, as far as I recall, was that we had to get over our obstacles first in experimentation before we could think of anything in the way of volume.
- Q. This was after you had overcome the CO₂ gas problem, wasn't it?
- A. Yes, we didn't enter into any discussions prior to that.
- Q. Then the obstacles you had in mind were getting the product into one package, dealing with this sticking in the core box, and the question of working life; is that correct?
- A. Those were the remaining obstacles that apparently were in the way.
- Q. Do you remember Harry Leas asking you when the Vulcan Foundry could get a shipment of Core-Min-Oil for use?
- A. No, I don't recall that he ever asked me that question.
- Q. Do you remember any such discussion with him?
- A. It makes no definite impression on my mind at the present time. That might easily have been entered into in a casual way.

- Q. Do you have any recollection of an application for patent which was ultimately filed in the name of Mr. Ruddle and Mr. Spotswood relating to the subject of Core-Min-Oil? A. Generally?
 - Q. Yes. A. No, I never heard of it. [682]
- Q. Do you ever recall any discussion of any application for patent relating to a core oil made in the name of Mr. Spotswood?
- A. Yes, Mr. Ruddle repeatedly made mention of patents pending, I believe in the earlier days of our association, and I recall that he told me at one time later that in some way it had become finalized: either a patent had been granted or he had assurance that it would be granted. That is as far as I recall patent matters.
- Q. Do you remember anything about an application for patent involving Mr. Spotswood and Core-Min-Oil or anything related to Core-Min-Oil?
 - A. Only vaguely; nothing specific or definite.
 - Q. What do you remember?
- A. As I recall it, Spotswood was isolated as the individual who had determined the presence of CO₂ being detrimental, and in some way, the exact details of which I do not recall, if I ever knew definitely, I recall his name being mentioned some way with a patent. By whom I do not remember.
- Q. Do you remember that the Shell Oil Company was proposing to file an application on that in the name of Mr. Spotswood alone or in the name

Plaintiff's Exhibit No. 37—(Continued)
(Deposition of Arthur C. Waller.)
of Mr. Ruddle and Mr. Spotswood as joint inventors—anything in that connection?

- A. No, I don't know of that.
- Q. Do you remember any discussions with Mr. Ruddle about the fact that the Shell Oil Company was demanding that Mr. Ruddle, that he make an assignment of such an application to the company?
 - A. An assignment?
 - Q. Yes. A. What kind of assignment?
 - Q. An assignment of the application for patent.
 - A. No, I don't recall that. [683]
 - Q. You have no recollection?
 - A. I had nothing to do with the patent?
- Q. You don't remember any discussion with Mr. Ruddle relating to such subject?
- A. Not specifically. I have had many discussions with Mr. Ruddle, many conversations back and forth from the foundry. These things might easily have been touched upon, but in no wise are they implanted in my mind.
- Q. At the time this subject of an application for Spotswood was being considered, do you remember Mr. Ruddle and Mr. Peck protested to you, and in your presence to Mr. McSwain, about the fact that that was their property under the contract between Shell Oil Company and themselves and that they didn't intend to be beaten out of that application?

 A. No, I do not.
- Q. Or that they didn't intend to be denied the right to enjoy the invention?

- A. I don't remember any such conversation.
- Q. Do you remember in that connection that Mr. McSwain said to you, or at least that you said to Mr. Peck and Mr. Ruddle that Mr. McSwain had told you, in substance: "I have known Peck and Ruddle all their lives and their parents too, and if they are mistreated like this, I would never get over it"?

 A. Never.
- Q. You never made any statement to Mr. Ruddle or to Mr. Peck to that effect?
- A. Never heard any such statement directly or indirectly.
- Q. Do you ever remember making any solubility tests in your own office relating to Core-Min-Oil or cores made with Core-Min-Oil?
 - A. Did I personally?
 - Q. Yes. A. Yes.
- Q. Will you describe what you did there, Mr. Waller?
- A. I took a small bottle of Mr. Ruddle's Solution which contained [684] no emulsified asphalt; put it in a small tin like the lid of a jelly can or something of that nature to a depth of about an eighth to a sixteenth of an inch.
- Q. A shallow container, and a very shallow depth?
- A. A shallow container, with a very small amount to completely cover the bottom. That I placed upon a steam radiator in my office and left it there until it had evaporated—that is, all the

liquid portion had become volatilized. There remained then on the bottom a whitish opalescent deposit, which subsequently broke up, curling at the edges slightly into pieces about as big as a penny or smaller. I gathered these pieces and put them into a bottle containing ordinary tap water and corked the bottle, but they did change their form.

- Q. They did not go back into solution?
- A. No.
- Q. What was the purpose of those tests?
- A. Curiosity.
- Q. Did you learn anything from the tests?
- A. Mr. Peck had shown me a roof treated with this solution, and I naturally wondered why it had not washed off. Therefore, I was conducting this experiment to parallel as nearly as I could a question that arose in my mind.
- Q. Do you remember personally making any tests by submerging Core-Min-Oil cores in water for substantial periods of time?
- Λ. I personally did not make any such experiments, though I believe there were some undertaken.
 - Q. Did you observe those experiments?
- A. No, I know of them only by inference or by reference of somebody else who had more information than I had.
 - Q. You made no observations of any such tests?
 - A. No.
 - Q. Who made the tests that you refer to?
 - A. I will amend that by saying that certain

cores or portions [685] of cores were thrown out of the Vulcan Foundry — Core-Min cores — and thrown into a ditch which contained a small amount of water, and that we noticed—I noticed that they were still intact a considerable period later on. That is the only actual experience that I can think of as far as my knowledge of putting those cores in water was concerned.

- Q. What was the result or effect on the cores in putting them in the water?
- A. I don't recall that we went down into the ditch and got them out.
 - Q. Oh, you don't?
 - A. I just noticed them there.
- Q. You would say positively you never made any tests by taking a bucket of water or anything of that sort and submerging cores made with Core-Min-Oil in that water, observing them over a period of time and observing that they failed to deteriorate in the presence of the water?
 - A. I cannot recall it at the present time.
- Q. Do you remember making any such tests with cores made with sodium silicate and asphalt emulsion alone?

 A. Submerging in water?
 - Q. Yes. A. No, I don't recall any.
- Q. Do you recall making any tests with a core oil made with sodium silicate and asphalt emulsion only, and of course sand added to make cores?
 - A. I think such a test was made, though I don't

Plaintiff's Exhibit No. 37—(Continued) (Deposition of Arthur C. Waller.) recall at this time specifically how it came about, nor what result was finalized on it.

- Q. I am not referring only to submergence tests, but any kind of tests made with such cores.
- A. Then that answer goes the same way: I don't recall.
- Q. You think it might have occurred but you have no recollection of it?
 - A. I have no definite recollection of it. [686]

Mr. Hackley: We will take a recess for about a minute. I want to talk to Mr. Peck and Mr. Ruddle.

(Short recess taken.)

Mr. Hackley: Q. Where were you on November 10 of this year?

- A. Creston, British Columbia.
- Q. Did you receive a letter advising you that the people whom I represent, Peck and Ruddle, in this case, wanted to take your deposition in this case at or about that time? A. Yes, I did.
 - Q. From whom?

A. From the secretary to the division manager in Seattle.

- Q. What did that letter tell you?
- A. It said that my—I will have to contradict myself. I did not receive that letter at that time. I received an air mail letter there to be sure, but it had nothing to do with this case. It was from Mr. McSwain about a matter in Alaska. I did not receive any letter at that time from anybody in our

Plaintiff's Exhibit No. 37—(Continued) (Deposition of Arthur C. Waller.) organization other than Mr. McSwain as mentioned.

- Q. When did you first receive any communication from anyone relating to this case and to your giving any testimony here?
- A. When Mr. Aurich called me in Vancouver, British Columbia.
 - Q. What date was that?
- A. It was a week ago Saturday; I think it is the 14th.

Mr. Aurich: November 15—Saturday, November 15.

Mr. Hackley: That is correct.

The Witness: That is right. Then that date is correct.

Mr. Hackley: Q. Did Mr. Aurich advise you that I was attempting to get hold of you to testify here or to give your deposition in this case?

- A. He said yes, that I was likely to be called.
- Q. And what did you tell him?
- A. He asked me what my [687] movements were going to be.
 - Q. What did you tell him?
- A. I told him that I was going to carry out my regular work, which would take me into Eastern Washington around Wenatchee and Spokane.
- Q. Did you tell him when you were next going to be in Scattle?
 - A. I told him I was taking the plane that day.
 - Q. From Vancouver?
 - A. From Vancouver to Seattle.

- Q. And how long were you going to remain in Seattle, did you tell him?
- A. I told him that I had this appointment at Wenatchee and was going to leave shortly after my arrival, which would be over Sunday—would leave for the East.
 - Q. Leave the 16th, Sunday?
- A. No, I wouldn't leave on a Sunday; I was planning to leave on a Monday.
 - Q. The 17th?
 - A. The following Monday, yes.
 - Q. On the 17th?
- A. Getting home on a Saturday and leaving on the following Monday was my plan.
- Q. That would be the 17th of November (exhibiting calendar to witness)?

Mr. Aurich: Yes.

A. That is correct.

Mr. Hackley: Q. I don't want to put dates in your mouth; if there is any doubt about it, we can check it, but it is the 17th. You told Mr. Aurich you were going to leave on the 17th?

- A. For eastern Washington, after I got to Seattle. That was my plan.
 - Q. For Spokane?
 - A. Wenatchee first and then Spokane.
- Q. Did you tell him where you were going to be during the rest of the week of the 17th?
- A. I told him I would probably be in Eastern Washington.

- Q. And did he ask you where you were going to be on the 24th and [688] 25th—today and tomorrow?

 A. No, I don't recall that he did.
 - Q. Did you tell him?
- A. I told him I was going to be in Eastern Washington, but my plans were not made so far ahead that I could say a week ahead where I was going to be.
- Q. Did Mr. Aurich tell you that I wanted to take your deposition in Seattle on the 24th or 25th or even on the 22nd?
- A. No, he didn't tell me that, any dates that anybody wanted to take a deposition from me.
- Q. He did not? When did you first learn that a notice had been given to take your deposition in Seattle for, say, the 24th?
- A. I think that I received a letter from the secretary of the—I can't recall even as short a time ago as that. There was some word that I would have to go—to come here for the 24th and 25th, and I forget now just exactly what means that was. I think Mr. Brewer wrote a letter.
 - Q. Who is Mr. Brewer?
 - A. One of the legal department of the Shell.
 - Q. In San Francisco? A. Yes.
 - Q. He wrote a letter to you?
- A. No, to Mr. Rafael, division manager at Seattle.
- Q. What did he say in that letter about your appearing for deposition?

- A. Just that my presence would be required.
- Q. Here, on the 24th or 25th? A. Yes.
- Q. When did you come down here?
- A. I came down Sunday. I got here Sunday afternoon.
 - Q. What time did you leave Seattle on Sunday?
 - A. One o'clock.
 - Q. By train or plane?
 - A. By train. One p. m.
- Q. You were at home all day Sunday, the 16th of November, weren't you? A. I was. [689]
 - Q. At your home in Seattle? A. I was.
- Q. You knew that a notice had been given to take your deposition, did you?
 - A. No, I knew I was to be served.
- Q. You knew that process was issued and out for you?

Mr. Aurich: Just a minute. I don't want to interrupt this or interfere. I don't think that that is a fair statement; I don't think the witness knew that any process had been out at all.

Mr. Hackley: He said he knew he was to be served.

Mr. Aurich: But he did not know that process was out. Will you ask him if he knew that?

Mr. Hackley: Q. How did you know you were to be served? A. Mr. Aurich told me.

- Q. On what date?
- A. When he phoned me in Vancouver, B. C.
- Q. On what date? A. On Saturday.

- Q. On Saturday, the 15th?
- A. Saturday, the 15th.
- Q. What did he tell you with reference to service?
- A. He simply told me that I was liable to be served and wanted to know what my plans were.
- Q. What did he tell you about service? Anything?

 A. He did not tell me to do anything.
- Q. Why did you dodge service of the subpoena in Seattle on Sunday, the 16th?
- A. I had no way of communicating with my superiors to know what they wanted me to do.
- Q. Do you understand that you are entitled to dodge service of a subpoena simply because your superiors may not want you served?
- A. I did not want to have my plans broken into unless it was necessary, and wanted to seek the advice of my superiors to find out what they wanted me to do.
- Q. You knew that the process server was trying to reach you all day on Sunday, the 16th?
 - A. Yes, I did. [690]
- Q. And did you instruct your wife to tell the process server that you weren't home?
 - A. I did.
- Q. You were home at the time she so instructed the process server? A. I was.
- Q. Were you in the house at the time that a child—I assume one of your children—said, in the pres-

Plaintiffs' Exhibit No. 37—(Continued)
(Deposition of Arthur C. Waller.)
ence of the process server, to you to hide, that the
process server was here, or words to that effect?

- A. No, I don't recall that.
- Q. And did you talk to Mr. Aurich again with reference to appearing here and arrange to come down and testify?

 A. No, I did not.
- Q. Why did you come here today? Because of the instructions from Mr. Brewer?
- A. I was instructed by Mr. Rafael Monday morning, Mr. Rafael being the Seattle division manager, to accept service.
- Q. What time did you get to your home on Saturday, the 15th?
- A. About six o'clock—five-thirty or six o'clock, in the afternoon.
- Q. What time did you talk to Mr. Aurich in Vancouver?

 A. Ten o'clock a. m.
- Q. Had you ever met Mr. Aurich before you talked to him that day?
 - A. Have I ever talked to him?
- Q. Had you ever met him before you talked to him that day? A. Yes.
- Q. You have known him for many years, haven't you? A. No.
 - Q. When did you first meet Mr. Aurich?
 - A. October 1941.
 - Q. Where was that? A. In San Francisco.
- Q. In what connection? In connection with this case? A. Yes.

- Q. He was interviewing you with reference to your study of Core-Min-Oil?
- A. No our legal staff here in San [691] Francisco and Mr. McSwain had matters pertaining to the asphalt department to discuss at the same time, and as a result, I came down. Both objectives were completed and I was introduced to Mr. Aurich at that time by one of our attorneys.
- Q. What date did you arrive in San Francisco on that occasion?
 - A. I couldn't tell you right now.
 - Q. Approximately? A. Middle of October.
- Q. And how long did you remain here (handing calendar to witness)?
 - A. I was here six days, as I recall it.

Mr. Hackley: Mr. Aurich, if you would like to tell the witness what the date or dates were that you conferred with him, just for the record, I have no objection.

Mr. Aurich: I can find them out for you, Mr. Hackley, but I can't tell you now any more than he can. I was just checking my calendar to see if I could try and fix the date, but I can't.

The Witness: I can find it for you, but I can't tell you right now.

Mr. Hackley: I don't want to delay this examination. I will suggest this, Mr. Aurich: that you call the reporter and tell him the date and have it inserted at this place in the record, and it will be satisfactory to me.

Mr. Aurich: Certainly.

(Reporter's Note: The date supplied by counsel was: "About October 16, 1941.")

Mr. Hackley: Q. When you talked to Mr. Aurich on Saturday, the 15th of November, last, did he advise you to avoid accepting service of subpoena in this case?

A. No, he did not.

- Q. He told you that a notice had been issued?
- A. Yes.
- Q. For your deposition? A. Yes.
- Q. Did he tell you that probably a process server would be [692] looking for you?
 - A. Yes, he said I would probably be served.
- Q. He didn't tell you, however, not to accept service?

 A. No, he didn't.
- Q. Did anybody connected with the Shell Company tell you not to accept service in this case?
 - A. No, they didn't.
 - Q. That was all your own idea?
- A. For the reasons given to you previously, yes; I wanted to seek the advice of my superiors as to what to do.
- Q. You were familiar with the fact, were you, that the process server was waiting at and around your home all of Sunday, the 16th?
 - A. Yes, I was.
- Q. As a matter of fact, he was parked out in front of the house in a car, wasn't he?
 - A. They were.

- Q. They were? It was more than one?
- A. One of them was.
- Q. And stationed around behind your house, too?
- A. That is correct.

Mr. Hackley: I offer for identification as Waller Exhibit 4 a letter dated November 22, 1941, received by me on this date from the law firm of Hayden, Merritt, Summers & Bucey, of Seattle, Washington, signed W. H. Hayden.

And I might say for your information, Mr. Aurich, that I have known Mr. Hayden for many years; I have known his signature and can identify this letter as being signed by him—and I assume written by him; the enclosure of a bill therewith, Bill No. 5310 for \$7.25 disbursements referred to in the letter as Waller Deposition Exhibit 4-A; and the second bill for service of process in connection with this proceeding and in accordance with the testimony of the witness here as Waller Exhibit 4-B; and the subpoena issued by the United States District Court for [693] the Northern District of California by the Clerk of the United States District Court at Seattle, Washington, as Waller Exhibit 4-C. I am going to offer copies of these documents.

Mr. Aurich: No objection to the substitution of copies.

Mr. Hackley: But you naturally may inspect the originals.

Mr. Aurich: I don't want to look at them.

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Plaintiffs' Exhibit No. 37—(Continued) (Deposition of Arthur C. Waller.)

Mr. Hackley: When I make copies I will send one to you.

Mr. Aurich: I understand they are being marked for identification at this time.

Mr. Hackley: That is correct, unless you will stipulate that they can be accepted on my statement without further proof.

Mr. Aurich: I don't question your word, but that certainly does not cure the hearsay statements of the letters.

Mr. Hackley: Would you go this far with me: that if Mr. Hayden were called as a witness that he would testify that he wrote this letter?

Mr. Aurich: No; I haven't read it, but I know I won't do it.

(The documents were marked respectively "Waller Exhibits Nos. 4, 4-A, 4-B and 4-C.")

Mr. Hackley: I have nothing further of this witness.

Cross Examination

Mr. Aurich: Q. I have a couple of questions, Mr. Waller. I understand you returned home from Vancouver to Seattle on November 15, Saturday.

A. Yes.

Q. After my phone conversation with you in Vancouver. A. That is right.

Q. And on Sunday, November 16, for the reasons you have given, you remained in your house and refused to accept service of whatever process might have been issued for you?

- A. That is right. [694]
- Q. And Monday morning, November 17, what, if anything, did you do with regard to accepting service of any process that might have been issued for you?
- A. I called Mr. Rafael on the telephone, the Seattle division manager, and asked him what he wanted me to do, explaining to him that I was surrounded by process servers, please advise me. He said that he would call San Francisco and advise me shortly. About eleven o'clock Monday——

Q. Morning?

A. —morning, he called me and said, "Accept service," and I immediately went out in the front yard and all of them were gone. Nobody was there to serve me.

Mr. Aurich: That is all.

Mr. Hackley: Mr. Aurich, just to fill out the record, I would like to add, because you have been very courteous to me in this connection, that I believe it was on that Monday morning you called me; I was out, you talked to Mr. Hursh and advised him that you understood that process had been issued for Mr. Waller, and that you would see that he appeared here either yesterday or today, whichever day we elected, and we accepted your offer and are very grateful to you for it.

Mr. Aurich: That is true. One further thing, however, Mr. Hackley: At that time that I phoned to Mr. Hursh, he advised me that the process servers

had been called off, because I told him that he could call his process servers off; that I would produce the witness here voluntarily in San Francisco without any subpoena. And he said, "Well, that is very nice, but we have already called the process servers off," because, according to Mr. Hursh, some contact had been made by Mr. Waller's office in Seattle and apparently your process servers had been informed that he would not be at home until Friday. [695]

Mr. Hackley: I think Mr. Hursh was in error, because I personally called the process servers after you had phoned me. He made the statement to me and I called Seattle and called them off.

(Duly Verified.) [696]

[Title of District Court and Cause.]

PLAINTIFFS' EXHIBIT No. 38 FOR IDENTIFICATION

DEPOSITION OF JOHN F. McSWAIN

Be It Remembered: That on Tuesday, December 3, 1940, pursuant to written Notice of Taking Depositions, hereunto annexed, at the offices of Messrs. Townsend & Hackley, in the Crocker Building, in the City and County of San Francisco, State of California, personally appeared before me, W. W. Healey, a Notary Public in and for the City and County of San Francisco, State of California,

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) authorized to administer oaths and to take acknowledgments, etcetera, John Floyd McSwain, a witness called on behalf of the Plaintiffs.

Roy C. Hackley, Esq., representing Messrs. Townsend & Hackley, appeared as Attorneys for Plaintiffs; and Alfred C. Aurich, Esq., representing Charles M. Fryer, Esq., appeared as Attorney on behalf of Defendants; and the said witness, having been by me first duly sworn to testify the truth, the whole truth, and nothing but the truth in the cause aforesaid, did thereupon depose and say as is hereinafter set forth.

(It is hereby stipulated and agreed by and between the Attorneys for the respective parties, that the deposition of the above-named witness may be taken on behalf of the Plaintiffs [699] at the offices of Messrs. Townsend & Hackley, in the Crocker Building, in the City and County of San Francisco, State of California, on Tuesday, December 3, 1940, before W. W. Healey, a Notary Public in and for the City and County of San Francisco, State of California, and in shorthand by Kenneth G. Gagan.

It is further stipulated and agreed that the reading over of the testimony to the witness and the signing thereof are hereby expressly waived.)

Mr. Hackley: You will stipulate to dispensing with the Notary?

Mr. Aurich: Yes.

Mr. Hackley: Do you want to stipulate to waiving the signature?

Mr. Aurich: Yes.

Mr. Hackley: We might as well, unless something comes up.

Mr. Aurich: I think, under the rules, the witness also has to waive reading and signing.

Mr. Hackley: Suppose we let that go until the end, because he may want to change his mind on that.

Mr. Aurich: All right.

JOHN FLOYD McSWAIN,

Called as a witness on behalf of Plaintiff, having been first duly sworn to testify the truth, the whole truth, and nothing but the truth, testified as follows:

Direct Examination

Mr. Hackley: Q. Will you state your full name, age, and residence?

A. John Floyd McSwain; my age is 54; my residence is 2726 Dwight Way, Berkeley. [700]

Q. What is your occupation?

A. I am Manager of the Asphalt Department of the Shell Oil Company.

Q. That is the Shell Oil Company, a Defendant in this case?

- A. Shell Oil Company, Incorporated, is the full title and it is the Defendant in this case.
- Q. How long have you been employed by the Shell Oil Company? A. Since July 6, 1931.
- Q. Prior to that were you in the oil business, or asphalt business?
 - A. Yes; since about 1921 or '22.
 - Q. Who were you with prior to Shell?
 - A. With American Bitumuls Company.
 - Q. Locally, or in some other city?
- A. I was in San Francisco for a year and a half. Prior to that I was with the Gilmore Oil Company, at Los Angeles.
- Q. Are you acquainted with Allan Ruddle, one of the plaintiffs in this action?

 A. I am.
 - Q. How long have you known him?
- A. A great many years. I couldn't tell just how many. Ever since high school days, I would say.
 - Q. Going back perhaps twenty years or more?
- A. Well, high school days would be more than twenty years back.
- Q. Are you acquainted with Ldyell Peck, coplaintiff with Mr. Ruddle? A. Yes.
 - Q. How long have you known Mr. Peck?
- A. Well, I would say that I have certainly been acquainted with him since our becoming involved in this Core Oil matter. I believe I probably had seen him when he was a small child.
 - Q. You speak of this "Core Oil matter." Would

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) you tell me what your first initiation into the subject was?

- A. Mr. Ruddle called on me.
- Q. About what was that date, do you recall?
- A. I think it was [701] late in 1937, although I couldn't give you the exact date.
- Q. That would approximate it, though, for the time being? A. I think so.
 - Q. He called on you at your place of business?
 - A. Yes.
- Q. That perhaps would have been in November or December, 1937?

 A. Something like that.
 - Q. Tell us what took place at that conversation.
- A. Well, Mr. Ruddle explained that he had a Core Oil involving the use of some secret formula, and he apparently wanted to interest our company, or somebody, in that Core Oil. I wasn't interested. I had heard various stories in times past of this formula in connection with other things, and I told him at that time that he had better take it some place else, but he urged that we come over to the Vulcan Foundry and see what had been accomplished over there, and as a result I made a visit, and I think with him, although I am not sure of that, to the Vulcan Foundry, and looked at some eastings which he said had been made with cores used with his material.
- Q. Before we go further with that, was anyone else present at this conference between yourself and Mr. Ruddle?

- A. I don't recall that there was. My recollection is that there wasn't.
 - Q. At least at this first conference.
 - A. At the first conference.
- Q. Mr. Peck was not with Mr. Ruddle, as you remember? A. No.
- Q. And nobody else was present on behalf of your company? A. I don't believe so.
- Q. You spoke of having heard of this secret formula several times before in the past. Will you outline what you mean by that?
- A. Well, I won't say this secret formula. I am not sure it was this secret formula. A formula that Ruddle was connected with [702] that was useful for apparently a variety of purposes; at least, that was their claim.
- Q. You, in other words, had talked, yourself, in general terms, before this first conference with Mr. Ruddle, about the subject of core oil?
 - A. No.
 - Q. Then what do you mean?
- A. Well, my recollection is a little foggy on that, but it is that at one time Allan told me that he could pour some of this into a bucket of water and the water would become solid. I didn't know what it was, whether it would be ice or not, but at that time it sounded quite fantastic to me, and I had heard various stories from various people about some patented material that they had.
 - Q. That Peck and Ruddle had?

- A. Well, I don't know whether Peck was in it.
- Q. At least it was identified with Ruddle?
- A. Yes.
- Q. You had no other information on that that you can recall clearly at this time?
- A. No, and the information I had was of a most general and vague nature. I had no specific information of any sort, other than, I think the statement was made, as I recall it, by Ruddle.
- Q. You have no certainty that the formula which was ultimately used to form cores was the same product that Ruddle had frequently been talking to you about?
- A. I don't recall at this time that there was any——
 - Q. All you know---

Mr. Aurich: Will you keep your voice up, please, Mr. McSwain?

Mr. Hackley: Q. About all you know on that subject was that Mr. Ruddle had been experimenting with something along the line of what he called a secret formula?

- A. That is all. I went no further than that. [703]
- Q. At this conference in the latter part of 1937, or whatever the exact date might have been, your first talk with Ruddle, he urged you to go over to the Vulcan Foundry and to examine some cores that had been formed by the use of this new Core Oil that he was talking about? A. Yes.

- Q. Where is the Vulcan Foundry?
- A. I want to correct that. It was not the Vulcan Foundry. It was McCauley's Foundry.
- Q. The work at Vulcan came later on, did it? McCauley's is located where?
- A. Well, it is in the industrial section of West Oakland. I couldn't give you the street address.
 - Q. In the Emeryville area?
- A. Well, I don't think as far out as Emeryville.
 - Q. Did you go over to McCauley's Foundry?
 - A. Yes.
- Q. About how long after your first talk with Mr. Ruddle?
- A. Oh, I think it was a few days later; may have been a week.
 - Q. Still in the latter part of 1937?
 - A. I think it was.
- Q. Did you go with anybody else but Mr. Ruddle to McCauley's Foundry?
 - A. Yes. I believe Mr. Harsch went with me.
 - Q. Ray Harsch, of your organization?
 - A. Yes.
- Q. Did anyone else go along, Mr. Peck, or anybody?
- A. Mr. Peck, I don't think so, no. In fact, I am quite sure that he didn't.
- Q. Well, just Mr. Harsch, Mr. Ruddle, and yourself?

- A. Yes, although it is possible that Mr. Waller went along, although I can't say.
 - Q. Who is Mr. Waller?
- A. He is an employee of our company, and was attached to my department at that time.
- Q. At the first conference before you went over to McCauley's Foundry did Mr. Ruddle outline to you anything about the ingredients that went to make up his Core Oil?
- A. I don't recall that [704] he did, unless it was to say that it contained an asphalt emulsion.
- Q. He outlined that particularly, because you people are in the asphalt and oil business?
 - A. Yes.
- Q. He did lay some accent on the fact it was a product which included asphalt emulsion in it, or that utilized asphaltic emulsion?
- A. Well, my presumption would be that is the reason he came to us.
- Q. Did he refer to his product at that time as Core-Min-Oil? I am referring to the time of the first conference in the latter part of 1937?
 - A. I couldn't say.
 - Q. You have heard that phrase? A. Yes.
- Q. That is the name which Peck and Ruddell had used to identify this Core Oil; is that so?
- A. In so far as I know it was. I think it was referred to in our contract as Core-Min-Oil.
- Q. Did Mr. Ruddle, at the time of your first conference, indicate that he was negotiating with

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) any other companies than yourself to take on and sell this product?

A. I couldn't say.

- Q. Do you remember that he mentioned to you that he had been negotiating with the American Bitumuls Company, your old concern?
- A. I don't know whether that was at the first conference or not.
- Q. He did at some time mention that fact to you, did he?

 A. Yes.
- Q. Did Mr. Ruddle, at the time of your first conference, give you any sales talk on the product, make any representations that you now recall, just what he believed his core oil had over all core oils?
- A. I don't remember the specific statements, although I am quite sure that he did, because he was trying to sell an idea. It is reasonable to suppose that he would have.
- Q. But, specifically, you don't recall any of those statements [705] that he may have made.
- A. Well, I don't recall the specific statements. I recall that he stated that he was having difficulty with it, that sometimes he would get a good core and sometimes he wouldn't, but that he hadn't been able to figure out the whys of it.
 - Q. He indicated he had some problems?
 - A. Yes.
 - Q. Did he indicate he was still working on those?
- A. I cannot remember the specific conversation. My recollection is the general trend of the con-

versation, I don't recall the specific statements. I remember there was difficulty with the cores.

- Q. You don't remember what those difficulties were?
- A. Well, except some cores would be good and some wouldn't. Some would be strong, some would be soft at different times.
- Q. Did he discuss with you the question of drying time of the cores, saving drying time?
- A. Well, it was discussed many times. You are referring to the first interview?
 - Q. I am referring to the first interview, yes.
- A. Yes. Well, that was discussed so many times. I don't recall his making the specific statement at that time. My recollection of the first interview is that he was selling the idea and quite possibly he may have referred to many things, but, as I say, that was referred to so many times afterward I don't remember when the first time was.
- Q. It is hard for you to isolate any one instance? A. Yes.
- Q. As a matter of fact, you talked to Mr. Ruddle, for that matter, and Mr. Peck, as well, many, many times on this subject, did you not, over a period of several months?

 A. Yes.
- Q. Did Mr. Ruddle at any time in these early conversations, without necessarily tying you down to the very first one, make some state- [706] ment that he felt his product had a superior drying time,

or shorter drying time, to the standard core oils?

- A. Well, I think it is quite likely.
- Q. You have some recollection of such a thing?
- A. Yes, because he must have been presenting arguments in favor of it or we wouldn't even have considered the matter.
- Q. Can you help me by telling me what some of those arguments were, or do you remember any of them?
- A. The shorter drying time was—You are speaking of it generally, I cannot confine myself to the first interview.
 - Q. That's right.
- A. The general trend of the preliminary discussions was a shorter drying time and economy, that is, theoretical, at least, a lower cost material, because we didn't know at that time what the material would cost, we had no figures other than theirs, not knowing what the material was. My recollection is he claimed greater strength for the cores. I believe the shorter drying time was one of the things.
 - Q. Resistance to heat, perhaps?
- A. Well, possibly, although all cores have to be resistant to heat.
- Q. It would vary in degree between cores, however, wouldn't it? It is one of the things you would have——
 - A. Yes. Well, sufficient heat resistance.
 - Q. Adequate for the core? A. Yes.

- Q. Do you recall saying to Mr. Peck and Mr. Ruddle something like this: "The Shell Company is always looking for a new market for one of their products and if a product has the merits that you claim for it I know Shell will make a better deal with you than any other concern, because they have the finest sales organization in the United States; when they have something to sell they really sell it."

 A. I don't recall it. [707]
- Q. Do you recall making some such statement as that, in substance?
- A. I have no recollection of any specific statement, either time or place, of any such statement of that sort.
- Q. Would you say you did not make that statement?
- A. No, I would not. There are some words that are not my words. I would say that I didn't say——
 - Q. No. I mean the substance of those words.
- A. Well, I wouldn't even say the substance. Will you read that statement again?
- Q. Yes. The statement here which I might tell you is attributed to you in original notes which Mr. Ruddle made after your conversation is: "The Shell Company is always looking for a new market for one of their products, and if a product has the merits that you claim for it I know Shell will make a better deal with you than any other concern, because they have the finest sales organi-

zation in the United States; when they have anything to sell, they really sell it."

- A. The statement that they would make a better deal—what was the rest?
- Q. The wording is: "That the Shell will make a better deal with you than any other concern, as they have the finest sales organization in the United States." That is what whole phrase. Is that what you mean?
 - A. Yes. I cannot claim the statement.
- Q. How about the statement: "When they have anything to sell they really sell it."
- A. Well, it is possible that I might have said that.
- Q. It would be more or less a natural thing for you to say?
 - A. It wouldn't be surprising.
- Q. Do you remember that Mr. Ruddle, in talking to you, expressed considerable apprehension about being, as he referred to it, robbed of his invention by any companies?
- A. Yes, I believe he evinced [708] that suspicion.
- Q. It is quite a common thing for inventors to talk that way, isn't it?
- A. I haven't had too much experience with inventors, so I cannot pass as an expert.
- Q. Mr. Ruddle did indicate that he was apprehensive, or that he felt he would produce something with merit here only to lose it by having

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) himself shoved out of the picture, something of

that sort?

A. My recollection is, his thought was he would divulge his secret formula to us, and that we would then develop the formula. That was the reason, as I recall it, that he did not divulge his formula to us until after a contract had been signed.

- Q. Do you have any memorandum, notes, or diary entries of your original talk with Mr. Ruddle?
 - A. Of my original discussion with him?
 - Q. Yes, your first discussion.
 - A. I don't recall any.
- Q. Do you keep a regular business diary, yourself?A. Not regularly, no.
- Q. Have you examined your records to determine if you have any original memoranda written contemporaneously with your first discussion with Mr. Ruddle, relating to that conference?
 - A. Yes.
 - Q. Did you find anything?
 - A. I found only one letter.
 - Q. Whom was that letter addressed to?
 - A. Mr. Ruddle, I think.
- Q. That was written subsequent to the first conversation, shortly afterward?
- A. I assume from the date that it was, and the subject-matter would indicate that it was, because prior to that I had had no discussions with him on any subjects.

- Q. Did you keep a copy of that letter?
- A. Yes.
- Q. Have you got it here? (Witness produces a letter.) [709]

Mr. Hackley: I ask that the letter submitted by the witness, dated January 14, 1938, addressed to Mr. Allan Ruddle, signed "Shell Oil Company, J. F. McSwain, Manager, Asphalt Department," and marked "Original signed by R. Harsch," be received as Plaintiffs' Exhibit 1.

(The document was marked "Plaintiffs' Exhibit 1.")

PLAINTIFFS' EXHIBIT No. 1

C 3-1-5

January 14, 1938.

Mr. Allan Ruddle Crocker Building San Francisco, California

Dear Mr. Ruddle:

We have analyzed the sample of core sand which you left with us on January 13, and report below the results:

Pass—Retained	%	Sq. ft. per lb.			
30 - 40M	1.9	x	.27	=	0.5
40 - 50M	18.0	X	36	=	6.5
50 - 80M	73.6	X	55	=	40.5
80 -100M	6.3	X	75		4.7
100 - 20M	.2	X	120	=	.2
200 - M	.0	X	200	=	0
Wash	.0	X	300	=	0

Surface area, sq. ft. per lb. = 52.4

Bitumen Index on 0.0 Curve =x 0.0008 (lbs. oil per _____ sq. ft. area)

Lbs. of oil per lb. of aggregate =4.20 or 4.20% by weight Specific Gravity 2.63

% of voids in compacted sand 36.4 to 37.9 (2 methods)

The oil content given above was computed according to the method used by the California Highway Department for oil mixes and indicates that the grains of sand are very smooth and dense and require a minimum of oil for coating. It would be our suggestion that a trial mix be made in which the weight of solids in the emulsion solution mixture is approximately 4.2% by weight of the sand.

The voids in the compacted sand are approximately 37% and in order to make a porous structure the volume of solids added by the solution should not exceed or possibly even approach this figure. It might be desirable to determine the voids of a core which is thought to be satisfactory as to porosity and from this could be computed the permissible amount of solids to be added by the solution.

The sample of Union Oil Company's emulsion has been tested and is reported to be of the same essential characteristics as our Y-104 Colas Pre-Mix. It is felt that as long as the emulsion will satisfactorily mix with your solution without coagulation or separation, the final consistency of the core is definitely a function of the percentage of the solution emulsion mixture to the sand.

We shall be glad to assist you further as you may require.

Yours very truly, SHELL OIL COMPANY.

Original signed by

R. HARSCH.

J. F. McSWAIN,

Manager, Asphalt Department.

Mr. Hackley: Off the record a second.

(Discussion between Counsel off the record.)

Mr. Hackley: Q. I note this letter that you have handed to me appears to be a carbon copy. Was the original mailed to Mr. Ruddle?

- A. I assume that it was.
- Q. That was the intention on your part?
- A. Yes; either mailed or handed to him.
- Q. I also note that the letter is marked "Original signed by R. Harsch." That is the Ray Harsch you referred to?

 A. Yes.
 - Q. Did he dictate the letter, or did you?
- A. I couldn't say without looking at the file copy, that is, the pink sheet, but from the subject-matter I would say that he dictated the letter.
- Q. Did you approve the sending of the letter before it went out?
- A. Quite possible I did, because if I had approved it I would have signed it, and my initials

are on top of the letter, indicating I approved it after it was sent out.

- Q. The initials written at the top of the first page, "J. F. M.", are your own initials?
 - A. Yes.
 - Q. That is your handwriting? A. Yes.
- Q. There are some pen changes of some of the figures in the letter, particularly in the formula or the analyses on the first page? A. Yes.
 - Q. Do you know who made those changes?
 - A. I don't know.
- Q. You don't know the purpose for which they were made? [710]
- A. Well, it was undoubtedly a typographical error that was being corrected at that time.
- Q. It looks as though they would have had to be made for them to come out accurately.
- A. Well, it comes out accurately, I assume. I hope it does.
- Q. It does, I think. Going back to the trip to McCaulev's Foundry, that was your second contact with Mr. Ruddle, was it, on this subject?
- A. As I recall; however, he may have called at the office in between. I don't recall whether he did or not.
- Q. Your present best recollection is that probably was the second contact? A. Yes.
- Q. That would have occurred, I think you said, in the latter part of 1937?
 - A. I think so.

Q. Would it have been prior to the letter Exhibit 1, which is dated January 14, 1938?

A. I am under the impression that it would, that is, the subject of this letter would indicate that it was, the subject-matter.

Q. You went over to McCauley's Foundry? Whom did you meet over there, as you recall?

A. The only man I can recall meeting was the core-maker.

- Q. What was his name?
- A. I couldn't tell you.
- Q. Didn't Mr. Spotswood meet you over there at McCauley's Foundry, or go over with you?
 - A. At that time?
 - Q. Yes; the very first time.
 - A. I don't think so.
 - Q. Would you say positively that he didn't?
- A. No, I won't say positively, but I am quite sure that he didn't. I can see no reason why he should have at that time.
- Q. What did you observe at the McCauley Foundry with reference to the cores made with the Ruddle product?
- A. As I recall it, we saw a pump bowl that Ruddle said had been cast, using one of [711] his cores. We may have seen some cores, I am not sure of that. It seems to me that he had some cores around there some place that he had made at various times.
 - Q. Was the fact these cores were made with the

Ruddle product confirmed by the McCauley man that you talked to there?

- A. I don't recall that. It may have been, but I have no recollection of his making any definite statement on the subject.
- Q. You don't recall the name of the McCauley man that was there?
 - A. No, I don't. I haven't the slightest idea.
 - Q. Would you remember him if you saw him?
- A. Well, I might possibly. He was a big man, so far as I remember, and that is the only time I saw him; it was very casual, he was busy making core, so, as I recall it, we didn't stand around and talk to him very long; I didn't.
- Q. What else took place over there, anything further?
 - A. I think we looked at the oven.
 - Q. What kind of an oven was that?
- A. It was a gas-fired oven. I can't give you any more definite information, the ordinary type of open-fired oven.
 - Q. It was an open-fired oven? A. Yes.
- Q. Did you have any further discussion at that time with Mr. Ruddle about the merits, or his claim of merits of his product?
 - A. Well, it is quite likely.
 - Q. What is your recollection?
- A. Well, I have no specific recollection of statements that he made at that time, only, as I say, it would be most surprising if he didn't make such

a statement. In calling our attention to a bowl that had been cast, he must have made some statement.

- Q. Probably did as good a sales job as he felt he could do there? A. Quite likely. [712]
- Q. What did you instruct your employees to do, if anything, after that with regard to the Ruddle solution?
- A. Well, the next definite step—it is extremely difficult for me to remember just the order of the developments.
- Q. Maybe I can help you a little bit, here. Do you remember that you, following the McCauley conference, we will call it for the moment, you asked Ruddle to run some tests for Mr. Spotswood and Mr. Waller, so they might witness the making of cores with the Ruddle solution, Core-Min-Oil?
- A. I don't recall that Spotswood was in on it at that time; he may have been, but I think that we did have Waller go over there and check some—observe the making of some cores. I won't say Spotswood wasn't there, but I don't recall that he was.
- Q. You say "go over there." Were these to be run at the McCauley Foundry?
 - A. I think so.
 - Q. You did not attend those tests, yourself?
 - A. No.
 - Q. Whatever you know about them is something

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) that has been furnished to you by some of your employees in the way of information?

A. Yes.

Q. Would you say it might have been the Vulcan Foundry where these tests were to be run; are you certain, in other words, that it was McCauley's?

A. I am quite sure it was the McCauley Foundry, although I wouldn't be too positive.

- Q. Have you records there at the Shell Oil Company of any tests that were made?
 - A. It is possible.
 - Q. Have you made any check to determine that?
 - A. No, I haven't.
- Q. Where would those records be kept at your office?

 A. They would be in our files.
 - Q. In San Francisco? A. Yes.
- Q. You have also, as I understand it, the Shell Development Com- [713] pany, across the bay, in Emeryville? A. Yes.
 - Q. Some of this work was done over there?
 - A. Yes.
- Q. But records of the running of any tests would probably be in the San Francisco office, you believe? A. Yes.
- Q. Could you check your records to determine if you have in your file the subject of those original tests, particularly reports that may have been made to you, or to any other men of the company on the part of your employees?
 - A. Could I check them?

- Q. Yes. A. I think so.
- Q. Will you do that at our noon recess, please?

Mr. Aurich: Tests at McCauley's?

(Discussion off the record.)

Mr. Hackley: Q. Do you recall over what period of time the tests were made which were made either at Vulcan's or McCauley's, it makes no difference, but over what period of time?

- A. What period are you referring to, the entire period?
- Q. No. This is in the preliminary stage before any contract was entered into.
- A. Oh, I would say several weeks, possibly a couple of months.
- Q. I want, in calling for those reports, all reports relating to tests made by the Shell Oil Company of the Peck and Ruddle product, Core-Min-Oil, prior to the execution of the contract, which was April 8, 1938.

Mr. Aurich: I understand those are the reports of tests run either at McCauley or Vulcan.

Mr. Hackley: That's right.

- Q. Were any tests run, to your knowledge, prior to the signing of the contract, by your company, or under the direction or control of your company, at any place other than the McCauley or Vulcan foundries?
- A. Well, I think some tests were run at Martinez. [714]
 - Q. By whom?

- A. They were run by Spotswood.
- Q. Were any run at Emeryville?
- A. Not so far as I know. I am quite sure there were not.
- Q. At Martinez, would those be run by Shell Oil Company, Incorporated, or by Shell Development Company?
- A. Shell Oil Company, Incorporated, or its predecessor at that time.
- Q. There has been since the date of this original contract a reorganization? A. Yes.
- Q. The present company has succeeded to whatever——
 - A. That is my understanding.
- Q. The records, of course, would show that. Mr. Spotswood, at the time we are testifying to now, the period from the latter part of 1937 to the time of signing the contract, was employed by the Shell Development Company?

 A. Who?
 - Q. Mr. Spotswood.
 - A. The Shell Development?
 - Q. Yes.
- A. No, I don't think so. I am not familiar with the payroll set-ups of the two companies, but my understanding was a Shell Oil Company, Incorporated, employee.
 - Q. How about Mr. Spiri?
- A. Spiri was, as I recall it, employed by the Shell Development Company, and loaned to our company for this purpose.

- Q. Did you examine any of the cores made during the period of tests run at, whichever it may be, the McCauley or Vulcan foundries prior to signing the contract?
 - A. I am quite sure that I did.
- Q. Do you remember what your reactions to those cores were, whether good, bad, indifferent?
- A. My reaction was based upon almost a complete lack of knowledge of cores. This was my first experience with a matter of that sort.
 - Q. You were just the man to pass on this job?
 - A. Yes, quite ideal.
- Q. What was your reaction with such knowledge as you had? [715]
- A. Apparently they looked very good, some of them. We had a variety. We had the same variation that Ruddle had had.
- Q. Do you recall at that time any discussion of the fact that problems were run into in making these in what I refer to as an open gas oven, due to the presence of CO₂?

 A. Yes.
- Q. That was the difficulty which was recognized there?
- A. That is the difficulty that we determined. It hadn't been recognized until we observed it.
- Q. You recognized and considered that before you went into the contract, didn't you?
 - A. Yes.
- Q. Do you remember approximately when the subject of a contract first came up?

- A. I cannot give you the exact date of that.
- Q. Would it have been about February, 1938?
- A. Well, it might have, although I wouldn't undertake to define the exact date. There may have been conversations relating to it from the inception of the deal, that is quite possible. In other words, the only reason for our having anything to do at all with it would be contemplating some sort of a contract.
- Q. You would fix the date of actual negotiations for a contract as sometime prior, commencing sometime prior, of course, to the signing of the contract in April?

 A. Naturally.
- Q. Do you remember how the negotiations for the contract, itself were originally initiated?
 - A. Negotiations for the contract?
 - Q. Yes.
- A. I wonder if you could define that a little more; "negotiations" is a broad term. The very first interview was the start of the negotiations.
- Q. Right from the start I think we can concede that Peck and Ruddle were interested in making a deal, or they wouldn't have been there in the first place.
 - A. I wouldn't have been talking to them. [716]
- Q. But at some point in there apparently your company became sufficiently interested in the transaction to get right down to business to the point of drafting a contract. I would like to know, if you

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) can recall, the specific circumstances that arose at that point.

- A. Well, can you still make it more definite?
- Q. I was not there you know, and I am really having trouble for that reason, but usually in a transaction of this sort you go through a process of discussion and investigation, and at some point the subject congeals necessarily so that it results in getting down to the brass tacks of preparing a contract.

 A. Yes.
- Q. Obviously, since a contract was prepared at some stage of the game, the date I do not have, but I would like to know if you have any recollection of who first proposed the possible terms of a contract, who first expressed the view that now was the time to get down to the business of preparing a contract; whatever you remember in that line.
- A. It is quite possible that we suggested that this was the time.
- Q. Did you discuss the terms of the contract at the outset with Mr. Peck, or Mr. Ruddle, or either of them?
- A. I think we submitted a proof. It is quite possible the general terms were discussed prior to that, although I wouldn't be sure of that sequence.
- Q. Did you discuss the question of patent protection on the product Core-Min-Oil?
- A. Well, that was discussed. Now, whether it was discussed preliminarily to the contract, or during the time when the contract was being worked

on, I couldn't say; undoubtedly the question of patent protection came up early in the conversations, owing to the fact that they had a presumably patented material and a secret material.

Q. Yes.

A. Just when the patent phase of it came in I couldn't [717] be very sure.

Q. You, of course, remember that Mr. Ruddle or Mr. Peck frankly stated that they didn't have patents at that time on the product?

A. They had patent applications.

Q. They had patent applications pending in the Patent Office? A. Yes, so they said.

Q. But no issued patents?

A. I believe that is correct.

Q. You remember, of course, Mr. Ruddle did indicate apprehension to letting this thing leak out to strangers and finding himself, as he put it, perhaps robbed of his work, of his invention, not only the possibility of your own people carrying it away, but of strangers; isn't that correct?

A. I don't know that he expressed the idea of strangers doing it. I think he was suspicious. My impression is that he was suspicious of corporations.

Q. You remember that, of course, that Mr. Ruddle, or perhaps Mr. Peck, were anxious that you keep any information you might get on this thing from leaking out, keep it to yourself, of

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) course, until this deal was completed; you remember that?

A. Yes.

- Q. Do you remember any discussions relating to patent protection, the possible patenting of this invention in foreign countries prior to the signing of the contract?
- A. Well, I don't remember the specific discussions, although there were unquestionably discussions, because I think that was covered in the contract.
- Q. Do you remember saying that your company would indicate to them the countries in which you believed patent protection was worth while, and in which you would be interested?
 - A. Well, something on that order.
- Q. Something along that line, that is all familiar to you in the general discussion?
 - A. It was in the general discussion.
- Q. Do you remember discussing your sales program that you intended [718] to initiate with reference to this product prior to the signing of the contract?

 A. Specifically, you mean?
 - Q. Yes. A. No, I don't.
- Q. Maybe I can refresh your recollection a little bit. Do you recall anything that you said to Mr. Ruddle about the sales force of the Shell Company, and its country-wide nature?
- A. It is quite likely that I referred to that, because it is a fact. That would be brought up in the discussion.

- Q. Do you remember saying anything about the fact the Shell Oil Company had something like 5000 salesmen throughout the United States?
- A. I don't remember specifying a number, because I didn't know how many salesmen. I don't think I knew at that time how many salesmen the Shell Company had throughout the United States. I may have said thousands, but I wouldn't undertake—I couldn't guess a number.
- Q. You would not say you did not use, yourself, the one figure "5000"?
- A. Well, I would say that it would be quite unlikely.
 - Q. If you had.
- A. Yes. I might have said several thousand, but I don't remember any number at all.
- Q. Do you remember saying in that connection the salesmen of the Shell Company were in a position to call on virtually every foundry in the United States at least once a month?
- A. That is quite likely that some such statement might have been made.
- Q. Do you remember saying, for instance, you would probably have a head office for the sale of this product at St. Louis, Missouri?
- A. Well, I wouldn't put it as a possibility, because that is a determination that would have to be made by someone besides myself.
 - Q. Do you remember saying that that would

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) probably be the case, [719] since the Middle West

of the United States was the big foundry center?

A. I might have said that the logical place to have it would be there, because of the fact the foundry industry is east of the Mississippi River.

Q. A large proportion is in the Mississippi Valley area?

A. I might have said that that was my idea, which isn't necessarily the idea of the company.

Q. During the negotiations leading up to the signing of the contract, who represented the Shel! Oil Company, other than yourself?

A. Mr. Gratama sat in on some of the interviews, handling the legal phase.

Q. He is head of your local legal department, is he?

A. No. He is, I think, the head of the legal department of the Shell Development Company.

Q. Primarily devotes himself to patents and patent matters? A. Yes.

Q. He is a lawyer?

A. Well, I have to assume that, yes.

Q. Well, I think he is an attorney of record in the case, isn't he? Did any other attorney for Shell Development Company participate in these negotiations leading up to the signing of the contract?

A. I don't recall that anyone else did. You are referring to the negotiations with Peck and Ruddle?

- Q. Yes, leading up to the signing of the contract that you prepared and presented.
 - A. I don't recall that anybody else did.
- Q. Of course, the brains of the legal department were there to be used by you?
 - A. I assume that.
- Q. Did anybody else work with you in negotiating the contract, outside of the legal department?

 A. I don't think so.
- Q. Do you know which of the men in your legal department prepared that first draft of contract?
 - A. No.
 - Q. It was prepared by your company, however?
- A. Well, that is a [720] fair assumption, on my part, also.
- Q. Well, you are making a lot of assumptions there. I am trying to be liberal, because I know you are doing the best you can. How do you reach the assumption in this case? Somebody handed you a draft which you, in turn, handed to Peck and Ruddle? A. That is it.
 - Q. Who handed you that draft?
 - A. Mr. Gratama.
- Q. Was he present when you handed it to Peck and Ruddle?
- A. I am not sure about the final draft. There were several drafts. He was present at some of the interviews, but I cannot recall whether he was present at the time—I believe he was, however. It

is my guess that he was present when the contract was finally signed, although I cannot be positive.

- Q. You have a copy of it, that original draft, of course, Mr. McSwain?
 - A. I have a copy of the contract.
- Q. Will you secure a copy of that and produce it this afternoon?

Mr. Aurich: Why don't you show him a copy attached to the pleadings.

Mr. Hackley: That is the final form. I want a draft of the original contract.

The Witness: I don't think I have it.

Mr. Hackley: Q. Will you check your files?

- A. Yes.
- Q. If you have it bring it here. A. Yes.
- Q. And any subsequent drafts which were prepared on the one side or the other, as well, and we will go into that at that time. By the way, there was mention of these tests that were made up at Martinez. Those were by Mr. Spotswood, or under his direction?
 - A. That was my understanding.
- Q. Those were reported to your company, I presume?
- A. I would have to check to be sure. The assumption is that [721] usually those things are.
- Q. There is a great deal of formality in the way you run your business?
- A. In some of it; some of the preliminary tests at Vulcan Foundry which were not particularly

scientific tests may or may not have been, I am not sure just whether Spotswood reported on those.

Q. Will you check for those reports, and I want only reports other than those annexed to the pleadings. There are a number of reports which we have received copies of. I have tied those to the pleadings. By the way, Mr. Aurich, you have admitted the authenticity of all of those documents annexed to the pleadings?

Mr. Aurich: I am going to have to let the record speak for itself.

Mr. Hackley: I am not going to check it now.

Mr. Aurich: Well, look at paragraph X.

Mr. Hackley: I was looking first at paragraph VII. There you said that as to Exhibit C, a letter of November 2, 1938, sent to me, as a matter of fact, by Mr. Gratama, you admit there was such a letter, and that it read substantially like Exhibit C. Now, I don't know what you intend by that limitation, "substantially," but I would probably have to call Mr. Gratama to tell me where it differs from the letter as he wrote it. I don't know whether that was a purposeful reservation or not.

Mr. Aurich: As a matter of fact, I did not prepare the answer. I do not believe it is purposeful, but I think it is merely a matter of——

Mr. Hackley: Well, I will take that up probably under Rule 34 or 36. We can pass it for the moment.

Q. Do you recall any further conversations that

you had prior to the signing of the contract with Messrs. Peck or Ruddle with regard [722] to the sales participation for this product on the market that might be enjoyed, and how much your company might be able to sell of the product, and things of that sort?

- A. Well, I think quite likely we had conversations of that nature.
 - Q. Tell me what you can remember about them.
- A. I don't remember any specific thing, other than dozens of conversations, and no one particular thing stands out in my memory. In the discussions some of the figures were supplied by them as to the quantity; I think they estimated the quantity that could be sold from figures that had been taken from some foundry magazine.
- Q. Did either Mr. Ruddle or Mr. Peck in the course of these discussions leading up to the signing of the contract show you a letter on the letterhead of "The Foundry", Cleveland, Ohio, November 26, 1937?
- A. Well, I wouldn't say it was this letter. I saw a letter similar to this one.
- Q. Will you examine that letter a little further and see if it does not jibe with your memory as something that was shown to you?
- A. I think if I looked at it for a week I wouldn't be able to identify it any more closely. It is substantially a letter similar to that, and quite possibly

that one, giving figures as to the amount of core oil that was used in the United States.

Mr. Hackley: I offer as Plaintiff's Exhibit 2 the letter on the letterhead of "The Foundry, 1213 West Third St., Cleveland, Ohio," dated November 26, 1937, carrying the signature of G. A. Pope, Assistant Advertising Manager.

Mr. Aurich: I object to the introduction of the letter in evidence on the ground no foundation has been laid, that it has not been properly or at all authenticated or proved; on the further ground that it calls for hearsay.

(The letter was marked "Plaintiff's Exhibit 2," and is herein [723] set out in words and figures as follows:

"The Foundry
Penton Building — 1213 West Third St.
Cleveland — Ohio

November 26, 1937

"Mr. Lydell Peck Lumber Processing Co. 814 Crocker Building San Francisco, Calif.

"Dear Mr. Peck:

"As you have already ascertained, it is virtually impossible to secure exact information on the total amount of core oil used in the foundry industry.

"However, this subject has always been of considerable interest to us and from time to time we

have been called upon to supply similar information. The technique, so to speak, which we use in cases like this, while, far from being conclusive, does provide certain basic information to work from.

"On receiving your letter, I undertook to bring our information on the subject of core oil consumption up-to-date and offer the following facts and conjecture for your information.

"From the 'Census of Manufacturers' linseed oil production was as follows for three stated years:

1927	***************************************	96,520,000	gal.
1928		104,000,000	gal.
1929		105,300,000	gal.

"It is estimated that 10% of this linseed oil goes into core oil and that the quantity of core oil made is approximately twice the linseed oil content.

"Thus, the approximate production of core oil for foundry use may be estimated as:

1927	•	19,304,000	gal.
1928		20,800,000	gal.
1929		21,060,000	gal.

[724]

"The foregoing, of course, does not take into account such core oils as are made from bases other than linseed oil. However, it does give an approximation.

"It is interesting to check the above information in the light of a survey made by The Foundry covering the purchases of ten representative Cleve-

land foundries during the three years from 1929 to 1931. The core oil purchases of these foundries were as follows:

Foundry	1929	1930	1931	3-year Average
# 1	9,735	3,465	5,170	6,123
# 2	2,704	1,357	3,780	2,614
# 3	,	10,294	6,666	5,653
# 4	4,600	7,600	2,400	4,867
# 5	337	229	457	341
# 6	5,943	6,338	2,220	4,834
# 7	4,995	0	0	1,665
# 8	98,920	47,007	19,168	55,032
# 9	115	0	0	38
#10	4,173	3,884	1,728	3,262
				
Total	131,552	80,174	41,589	84,430
Average	$13,152 \mathrm{\ gal}$	$8,017\mathrm{gal}$	$4,159\mathrm{gal}$	8,443

"So far as these ten foundries were concerned, the 'average' foundry purchased approximately 8400 gallons of core oil in the 'average' year. For sake of argument, suppose we assume that this average is typical of 2500 foundries (total number of foundries in the United States and Canada is 5386) thus, we have:

Estimated core oil purchases of 2500 larger foundries—21,000,000 gal.

"The remaining 3,000-odd foundries, let us assume, purchase on an average of 10% as much core oil per foundry as the larger ones. Therefore, we have:

Estimated core oil purchases of remaining 3000 smaller foundries—2,520,000 gal.

Esimated total core oil requirements of entire foundry industry—23,520,000 gal.

"It is interesting to note that the estimated core oil consumption of the entire foundry industry works out to be upwards of 20,000,- [725] 000 gallons per year on the basis of two different methods of 'conjecture'. In each case, the figures are admittedly hypothetical but the fact that they are rather similar, would seem to suggest that they may not be so far off.

"In any event, we hope that the foregoing will give you a broad picture of the possibilities for marketing core oil to the foundry industry. From the wording of your letter, we infer that you would be interested in knowing to what extent various specific brands of core oil are used in the foundry industry. Of course, this is information which we have no way of either obtaining or estimating. Core oil is advertised rather extensively in the advertising pages of The Foundry and it may interest you to peruse a recent issue to see to what extent this is true.

"We can only say that there is a very real market in the foundry industry for core oil and if you are interested in this market, there is no more effective or quicker way of acquainting the foundry industry with the merits of your particular core oil than

through an advertising program in The Foundry.

"We are enclosing a booklet descriptive of the foundry industry and The Foundry as an advertising medium.

"We trust that all of the information provided will greatly assist you in your study. If we may be of further assistance, please do not hesitate to call on us.

"Yours very truly,
THE FOUNDRY
G. A. POPE,
Assistant Advertising
Manager.")

GAPope:GF

Mr. Hackley: Q. Continuing with these negotiations now leading up to the contract, do you remember a discussion or discussions in which Peck and Ruddle, or both of them, wanted to [726] work out some minimum gallonage basis, or some minimum royalty basis to insure themselves a return under the contract?

- A. I don't recall that that was necessarily their position. So many angles were discussed, just where they all originated is difficult for me to recall.
- Q. Well, you recall there was a discussion of the question of minimum royalty or minimum gallonage? A. I believe there was.
 - Q. Do you remember any discussion relating to

the establishment of some price at which the product was to be sold, Core-Min-Oil?

- A. There were undoubtedly a number, or a lot of discussions as to price.
- Q. You remember there were discussions along that line?
 - A. There were discussions, yes.
- Q. Do you remember saying in effect to Peck and Ruddle that they could safely rely on your company to get the highest price the market would stand for a product of that sort in the interest of making a maximum profit for yourself and Peck and Ruddle, for that matter?
- A. I don't know that those were my words. I very likely explained to them that our interests lay in the getting of the highest price possible.
- Q. And they would, in turn, since they would participate on a percentage basis, profit just exactly as you would profit?
- A. That was undoubtedly brought up in the discussions.
- Q. I show you a document which appears to be a draft of agreement, with a great deal of interlineation, and ask you if you recognize it.

Mr. Aurich: The question is, Can you recognize that document?

A. It looks very much like my handwriting, not all; some of it is my handwriting, I think.

Mr. Hackley: Q. Does that appear to be, as far as you can [727] observe, a copy of that first draft

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) of the proposed contract between Peck and Rud-

dle and Shell?

A. I don't recall whether it is the first draft. It looks like a draft.

Q. A certain draft?

A. One of the drafts. Whether it was the first or second; I couldn't tell you now how many drafts there were. There were a number of them.

Mr. Hackley: I ask that the document thus identified by the witness be marked as Plaintiffs' Exhibit 3. I will make the statement for your information there will be further identification before it is finally presented, although we will go as far as we can with this witness.

- Q. With particular reference to the interlineation and the longhand writing on the document, I will start at the beginning and ask you what you can identify as your handwriting. At the top of the first page there appears an insert of the numeral "8" and the month "April." Is that your handwriting?

 A. No.
 - Q. Do you recognize that handwriting at all? A. No.
- Q. Further down in the first preamble there is added, "and to new compositions for other foundry uses, such as core covering."
 - A. That is my writing.
- Q. The next line, the words "and covered by" are stricken. Do you remember whether you struck those words?

- A. No, I don't recall.
- Q. At the end of the page, at the start of paragraph I, there is an insert, "to make, use or sell," which has an underscoring, and the caret. Do you recognize that handwriting?
 - A. I don't, no.
 - Q. It is not yours? A. No.
- Q. Going over to the second page, the third line, there is an insert, "in so far as they relate." Is that your handwriting? [728]
 - A. Well, I think it is.
 - Q. Do you remember making that insert?
 - A. No, I don't recall.
- Q. I would like to know if you remember striking out the words "relating to core binding," which appear on that same—
- A. No, I have no recollection whatever of striking that out. In fact, I don't recall the particular circumstances surrounding the interlineation.
- Q. Did you make the interlineation at the start of line 4; rather, is that your handwriting, "for foundry use"?
- A. "foundry use," it looks like mine, but "for" doesn't. It may be, though, I may have started to print.
- Q. It probably would be, wouldn't you think, Mr. McSwain? A. Yes.
- Q. Because of the probability of your putting the two words in. The paragraph closes, the first paragraph, No. 1, at the top of page 2, "make, use

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) or sell compositions for foundry use disclosed in". Is that your handwriting? A. Yes.

- Q. Then follows the typed portion, "said patent applications and patents." And added in handwriting is "while this license remains exclusive." Is that your handwriting, again?

 A. Yes.
- Q. In paragraph 2, on page 2, there is an insert at the start of the second line, "and other compositions for foundry use." Is that your handwriting?
 - A. Yes.
- Q. Paragraph 3, third line, the insert "same as 2." Is that your handwriting?
 - A. I think so.
- Q. When you said "same as 2", I presume—you can correct me if I am wrong—you referred to that as the same insert to be placed in the third line of paragraph 3 as the insert at the start of the second line of paragraph 2?
 - A. I imagine that may be your presumption.
- Q. Well, will you read paragraph 3 with that as an insert and see [729] if that still appears to be a fair presumption in that it would make sense as a paragraph?

 A. I think it would.
- Q. Paragraph 5, we have within the first line the words "do not intend to engage," which are stricken out, or apparently so, with a line drawn through them. Is that your handwriting?
 - A. I don't think so.
- Q. Do you have any recollection of whether you drew the line through those words?

- A. I don't recall.
- Q. You notice the words "will not engage" apparently were at one time stricken, and then the striking was erased. Do you remember whether you did that?

 A. No.
 - Q. Either the striking or the erasing?
 - A. No.
 - Q. You don't recall? A. No.
- Q. Line 2 of paragraph 5 has an insert, "same as 2," and the words "core binding compositions" are stricken. Is that your handwriting?
 - A. Yes.
- Q. Well, it would appear to be an insert in paragraph 4 and paragraph 3 in the same language which is inserted at the second line of paragraph 2?

 A. That seems to be.
- Q. I think we skipped reference to paragraph 4, here, a phrase, "same as 2" inserted in the second line is present; is that your handwriting?
 - A. Yes, I think it is.
- Q. Continuing now with paragraph 5, the second sentence, the fourth line of the paragraph has the insert of the phrase, "it is their intention not to"; the words "they will not" are stricken. Is that your handwriting?

 A. I believe it is.
 - Q. You didn't cross your "t" there.
 - A. No, I notice.
- Q. In the fifth line the insert is made, "same as 2". Is that your handwriting?
 - A. I think it is.

- Q. Your same testimony would apply to that reference as previously [730] applies where it appears?
 - A. Yes.
- Q. Paragraph 6 has the insert in the second line, "same as 2", and the words "core binding compositions" are stricken. Is that your handwriting?
- A. I don't believe it is. It might have been, at that.
 - Q. You would not say definitely it was not?
- A. No. It is a little lighter. I bear down on my pencil a little heavier.
 - Q. You might have been tired.
 - A. It is quite likely so.
- Q. Going on to paragraph 7 at the bottom of page 2, the third line has the insert, "and other compositions for foundry use"; the words "for use" are stricken. Then the word "sold" appears at the end of the line. Is that your handwriting?
 - A. This section, here?
 - Q. Yes. A. Yes, I think so.
- Q. There was apparently an insert of the word "of" after the word "sales" in line 4. That has been erased. Can you see that enough to tell whether that litle word "of" was in your handwriting?
- A. I can hardly identify it, but it seems reasonable to suppose that it was.
- Q. Do you remember making that particular insert there?
 - A. I don't remember the particular circum-

stances; that is, I don't remember making the insert, but—my answer is no.

- Q. In the fourth line, paragraph 7, the word "net", I guess it is "net", appears to have been stricken out. Do you remember whether you struck that or not?

 A. I don't remember.
- Q. After the word "sales" an insert, "to consumer". Is that your handwriting?
 - A. It looks very much like it.
- Q. A little later the word "refinery" is stricken out and there is inserted "Mfg. Plant."
 - A. Manufacturing plant.
- Q. That is an abbreviation for the word "manufacturing." That is [731] your insert, too, is it?
 - A. Yes.
- Q. At the start of the next to the last line of paragraph 7 there is the handwritten word "cluding sales tax", and the words "cluding freight" are stricken. Is that your handwriting?
- A. Where is the word "freight"? Oh; well, it looks like my handwriting. I cannot identify the striking out.
- Q. Your striking line looks about like anybody else's? A. Yes.
- Q. Over on page 3, paragraph 8, you will notice there are lines drawn through that whole paragraph, rather bold lines, apparently attempting to strike it. Do you remember doing that? You might read the paragraph to see if you recall it.

- A. I don't recall—you are asking me to recall the act?
 - Q. Yes. A. No.
- Q. Do you recall anything about any discussion of striking paragraph 8?
- A. I don't recall. I recall the discussions relative to the inclusion of this, that there were discussions relative to the inclusion, but I cannot recall now just the circumstances that led to the striking out of the paragraph.
- Q. Do you remember now whether that was stricken at your suggestion, or at the suggestion of Peck and Ruddle? A. I don't recall.
- Q. Of whether or not it would seem to be a good idea?
- A. I don't recall the circumstances leading to the striking out of the paragraph. As I read it here, I wonder why it was stricken out.
- Q. Going to paragraph 9, you notice the insert of the word "or" in the third line. Is that your handwriting? And the same word occurs again as an insert in place of "and" twice in the fourth line.
- A. Well, I can hardly identify it. It might easily be or it might not be. [732]
- Q. You would probably have to try out your writing of the word "or" to see how it looks?
 - A. Yes, under similar circumstances.
- Q. At the end of paragraph 9, this is a rather long insert, that line, "In the event Shell Oil sells

the solution part of Core-Min-Oil separately (e.i. without the asphalt emulsion component) then a sale of one gallon of solution shall be considered the equivalent of a sale of one and five-eighths gallon Core-Min-Oil."

- That is my handwriting.
- Q. On page 4, at the side of paragraph 10, appears the number "31". Is that your handwriting?
 - Might or might not be.
- Q. In paragraph 11, in next to the last line, there is an insert after "Core-Min-Oil" of the words "same as 2."
 - A. Looks like mine.
- Q. And it would refer probably to the same thing as we had previously in paragraph 2?
 - I would assume so. A
- Q. Paragraph 13, the added words "same as 2 within this agreement," inserted at the end of the line. Is that your handwriting? A. Yes.
- Page 4, paragraph 14, the first line an insert "for \$5000 or less."
 - A. That is my handwriting.
 - Q. The paragraph ends "right to use."
 - No. Α.
- Q. That is not your handwriting. Paragraph 15. after the word "Peck" in the third line is the word "and". Is that your handwriting?
 - A. I don't know.
 - It could or couldn't be, as a matter of fact?
 - A. Yes.

- Q. Paragraph 17, there is an addition to the last line which reads "Shell Oil will inform P. and R. of the patent numbers, term and further details of any foreign patents under this article." Is that your handwriting?
 - A. That is my handwriting. [733]
- Q. In the next to the last line in paragraph 18 there is a striking of the letters "re" in the word "retransfer." That is the prefix that is stricken. Do you remember doing that?
 - A. No, I do not.
- Q. Paragraph 25, an insert of the words "to Shell or its assignee." Is that your handwriting?
 - A. Well, I think it is.
- Q. Paragraph 21, the last sentence is placed in parentheses. Can you recognize that, or remember of doing it? A. No.
 - Q. You have no recollection of that?
 - A. No.
- Q. Paragraph 29, in the second line there is an insert, "notice of," and the word "the" is stricken. Do you recognize that striking?
 - A. I think it is mine.
 - Q. You didn't cross your "t" here.
 - A. No.
- Q. Paragraph 29, at the end, you add: "Any sublicenses granted under this article by Peck and Ruddle before notice of termination of this agreement shall remain in force." Is that your handwriting?

 A. I think so.

- Q. You notice there was apparently a bracket around paragraph 29, an erasure, an insert made and the word "out" was written and then erased.
 - A. Yes.
- Q. Can you state whether that word "out" was in your handwriting?

 A. I don't think so.
 - Q. Does it appear to be? A. No.
- Q. Do you remember anything relating to the erasure of that bracket and the word?
 - A. No, I don't recall the circumstances.
- Q. Paragraph 31 has added to it in longhand the words "Upon assigning the agreement as provided in this article Shell Oil will remain liable under its obligations herein until its assignee gives notice in writing to Peck and Ruddle that it will assume the obligations of this agreement." Is that your handwriting? [734]
 - A. I think so.
 - Q. You would say it was, would you not?
 - A. Yes.
- Q. There appears to be no alteration on page 8. On page 9 there is the change of the last word of the first line which read "agrees" and was changed to read "declare". Is that your handwriting?

 A. I don't think so.
- Q. I don't think we will ever identify that word, either.
 - A. Did you ask me if this was the first draft?
 - Q. Yes. I asked you at the outset if you identi-

fied it as the first draft, and I think you testified, you correct me if I misinterpret it, Mr. McSwain, that you could not tell whether the first draft, it was a draft made prior to the signing of the contract.

A. That is correct.

- Q. Do you remember now whether this was the first or some other draft of the contract?
 - A. I am quite sure it was not the first draft.
- Q. Do you remember the circumstances leading to the making of all these alterations in your handwriting of the contract, Exhibit 3? A. No.
- Q. Have you any recollection at all of going over that particular draft of the contract and making all those numerous inserts?
- A. Well, we worked over various drafts; I have no recollection of this particular draft, or the circumstances. I can draw a conclusion from the wording.
- Q. Well, I would rather have your recollection, so far as you can give it.
- A. The legal phraseology doesn't sound like my own.
- Q. The handwriting is yours, but you do not recognize the sense of it?
 - A. No, I would say not.
- Q. Do you remember whether those inserts were made in the presence of anybody else?
- Λ. No, I don't remember the circumstances[735] surrounding the making of this draft. Ruddle

was in my office at various times, and it may be at one of those times these changes were made.

- Q. Do you have any recollection of handing this particular draft of the contract to Mr. Ruddle and Mr. Peck after you made these inserts?
- A. No, I don't. As I say, we worked over various drafts; the particular circumstances wouldn't stand out in my memory of any particular action in connection with it.
- Q. You would definitely recognize now this as one of the early drafts of the contract which eventually was executed on April 8, 1938, and that you must at one time have had it in your possession and made these changes?
- A. I undoubtedly made these interlineations. I would not say it was necessarily one of the early drafts in the negotiations. It was one of the drafts.
- Q. Yes. Subsequent to that the contract was completed and signed on April 8, 1938?

A. Yes.

Mr. Hackley: I think I will offer that as Plaintiffs' Exhibit 3.

(The document was marked "Plaintiffs' Exhibit 3.")

PLAINTIFF'S EXHIBIT No. 3 LICENSE AGREEMENT

This agreement made as of the 8 day of April, 1938, by and between Lydell Peck of San Francisco, California, hereinafter referred to as "Peck", and

Plaintiff's Exhibit No. 3—(Continued.)
Allan B. Ruddle of San Francisco, California, hereinafter referred to as "Ruddle", and Shell Oil Company, a California corporation of 100 Bush Street, San Francisco, California, hereinafter referred to as "Shell Oil",

Witnesseth That:

Whereas, Peck and Ruddle warrant they are the owners of all rights to a new and useful core binding composition hereinafter referred to as "Core-Min-Oil", consisting of two components, a secret solution and asphalt emulsion, and to new compositions for other foundry uses such as core covering,

Whereas, Peck and Ruddle warrant that said Core-Min-Oil is fully described in (and covered by) U. S. Patent Application Serial No. 165,765, filed Sept. 25, 1937, entitled "Moulded Products"; U. S. Patent Application Serial No. 179,150, filed Dec. 10, 1937, entitled "Moulded Products"; and U. S. Patent Application Serial No. 184,237, filed Jan. 10, 1938, entitled "Composition of Matter", all filed in the name of Ruddle,

Whereas, Peck and Ruddle warrent that they are the exclusive co-owners of said U. S. patent application and warrant that there are no licenses or other interests outstanding.

Whereas, Shell Oil is interested in acquiring ex-

Plaintiff's Exhibit No. 3—(Continued.) clusive rights under the inventions disclosed in said patent applications,

Now, Therefore, the parties have agreed as follows:

1. Peck and Ruddle hereby grant unto Shell to make, use or sell

Oil an exclusive license, under the said three Ruddle U. S. patent applications, any renewals, continuations, divisions, substitutions of said applications and any patents to be issued thereon, and under any applications covering improvements of the inventions disclosed in said applications and other inventions insofar as they relate relating to core binding compositions for foundry use owned or controlled by Peck and Ruddle, and any patents issued, together with the right to sublicense third parties. Peck and Ruddle shall not operate under make use or sell compositions for foundry use disclosed in said patent applications and patents. while this license remains exclusive.

- 2. Shell Oil shall diligently attempt to sell Core-Min-Oil and other compositions for foundry use as covered by said patent applications or later patents.
- 3. Shell Oil shall diligently attempt to interest its affiliated, subsidiary and parent companies in the United States to sell Core-Min-Oil (same as 2) as covered by said patent applications or later patents.

Plaintiff's Exhibit No. 3—(Continued.)

- 4. The policy and method of marketing Core-Min-Oil or its components (same as 2) and the price thereof, shall be left entirely to the discretion of Shell Oil.
- (do not intend to engage)
 5. Peck and Ruddle will not engage in the business of making or selling (same as 2) during the life of this agreement within the City and County of San Francisco. Peck and Ruddle represent that they will not it is their intention not to engage in the business of making or selling (same as 2) core binding compositions anywhere in the United
- 6. Peck and Ruddle hereby grant unto Shell Oil any and all good will of their business of making and selling core binding compositions (same as 2) together with all their right, title and interest in and to the term "Core-Min-Oil".

States during the life of this agreement.

7. Shell Oil agrees that it and its affiliated, subsidiary and parent companies in the United States will pay as royalty to Peck and Ruddle on all their sales of Core-Min-Oil for use and other compositions for foundry use, sold in the United States, percentages of net sales to consumer prices F.O.B. refinery mfg. plant (excluding freight cluding sales tax and containers) according to the following sliding scale:

Plaintiff's Exhibit No. 3—(Continued.)

- 8. In the event Shell Oil decides to sell the solution part of Core-Min-Oil separately (i.e. without the asphalt emulsion component) then in applying the above sliding scale Shell Oil may multiply the actual gallonage of said solution sold, by a factor which will bring the gallonage up to the equivalent amount of Core-Min-Oil; this factor will be the recommended standard proportion of asphalt emulsion to solution for the year in question. It is understood that as royalty only the percentage of net sales price of the solution sold is payable to Peck and Ruddle when said solution is sold alone.
- 9. If Shell Oil does not sell for use in the United States at least 250,000 gallons of Core-Min-Oil, during the first two years from date hereof; or 500,000 during the third year; or 750,000 during the fourth year and or 1,000,000 during the fifth and or all subsequent years, then Peck and Ruddle may declare this license agreement non-exclusive for the United States and proceed to license third parties unless Shell Oil pays to Peck and Ruddle the royalties on such minimum yearly quantities. In computing the royalty so due, the royalty on the gallonage actually sold during the year shall be

Plaintiff's Exhibit No. 3—(Continued.) 15% of the actual sales price as provided in Article 7 and the royalty on the gallonage between that sold and the required minimum shall be 15% of the average sales price of the gallonage actually sold. In the event Shell Oil sells the solution part of Core-Min-Oil separately, e.i. without the asphalt emulsion component) then a sale of one gallon of solution shall be considered the equivalent of a sale of one and five eights gallon Core-Min-Oil.

- 10. To take advantage of the sliding scale of Article 7, or the minimum yearly sales provisions of Article 9, the sales of Shell Oil, its sublicensees, affiliated, subsidiary and parent companies in the United States may be consolidated.
- 11. Shell Oil and its affiliated, subsidiary and parent companies in the United States will keep accurate books of account of their operations under the terms of this agreement and will render to Peck and Ruddle on or before the last days of February, May, August and November, notarized statements for the prior three months periods ending December 31, March 31, June 30 and September 30, respectively, showing the amounts of Core-Min-Oil or the components for making Core-Min-Oil (same as 2) sold, the price realized therefor, and the royalty payable.
- 12. Shell Oil agrees that at the time of rendering said statements called for in Article 11, it will pay to Peck and Ruddle the royalties prescribed.

Plaintiff's Exhibit No. 3—(Continued.)

- 13. Shell Oil will permit a certified Public Accountant mutually acceptable to Shell Oil and to Peck and Ruddle to inspect during reasonable business hours, its records and accounts pertaining to Core-Min-Oil (same as 2) within this agreement.
- \$5,000 or less at reasonable cost and for the joint account of itself and Peck and Ruddle the Thomas U. S. Patent 1,561,956, issued November 17, 1925, entitled "Manufacture of Cores". If Shell Oil does so purchase said patent it will deduct one-half of the purchase price from one-half of the royalties payable under this agreement to Peck and Ruddle. Upon completion of said reimbursement, Shell Oil will transfer to Peck and Ruddle an undivided one-half interest in said Thomas patent. (right to use)
- 15. The term of this agreement shall extend until the expiration date of the last issued patent owned or controlled by Peck and or Ruddle covering Core-Min-Oil.
- 16. Shell Oil may terminate this license agreement in the United States at any time after five years from date hereof by giving thirty days notice in writing to Peck and Ruddle.
- 17. Shell Oil or an affiliated, subsidiary or parent company will file in its own name and at its own expense, patent applications in any country outside the United States in which it desires to make or sell Core-Min-Oil. The title to any foreign

Plaintiff's Exhibit No. 3—(Continued.) patent obtained shall vest in Shell Oil or the affiliated, subsidiary or parent company of Shell Oil, which shall maintain such patent at its own expense. Shell Oil will inform P & R of the patents numbers, term and further details of any foreign patents under this article.

- 18. Shell Oil may terminate this license agreement in any country outside the United States after five years from date hereof by giving written notice to Peck and Ruddle. Upon Shell Oil delivering to Peck and Ruddle written notice that it or its affiliated, subsidiary or parent company elects to terminate the license in a particular foreign country, Shell Oil will arrange within thirty days for the retransfer of the said foreign patent to Peck and Ruddle.
- 19. If Shell Oil or its affiliated, subsidiary and parent company is unable to obtain a patent on Core-Min-Oil in a particular foreign country within three years from date of filing patent application in said country then no further royalties shall be paid to Peck and Ruddle on sales in said country.
- 20. The royalty rate for Core-Min-Oil sold for use in foreign countries shall be one-half of the rate specified in Article 7 for like quantities. In calculating the royalties due, quantities sold for use in all foreign countries may be consolidated with each other but not with the sales for use in the United States and computed under the same sliding

Plaintiff's Exhibit No. 3—(Continued.) royalty scale. In case the sales price on which royalties are to be paid is payable in a foreign country or in a foreign currency, said royalty shall be subject to the same restrictions and limitations as may attach to the payment of the sales price if and when received.

- 21. Peck and Ruddle will instruct their patent attorney to give Shell Oil at its request all information concerning its pending patent applications (including copies of said applications and all office actions and amendments) and any future applications on improvements of Core-Min-Oil. (Peck and Ruddle will instruct their patent attorney to give Shell Oil's representatives at their request, a power of attorney to inspect and make copies of the Patent Office files of said pending applications.)
- 22. Upon request Shell Oil will take over the further prosecution of said pending United States applications and any future improvements thereof until further notice given by Shell Oil.
- 23. Peck and Ruddle will allow Shell Oil up to six months from date of receiving copies of the present filed Ruddle applications to investigate the patent situation in regard to Core-Min-Oil. In the event Shell Oil considers the patent situation unsatisfactory at or before the end of said six months period, then Shell Oil may terminate this agreement forthwith.

Plaintiff's Exhibit No. 3—(Continued.)

- 24. Peck and Ruddle and Shell Oil, its affiliated, subsidiary and parent companies, agree that they will use their best efforts to prevent information concerning the formula for Core-Min-Oil and its method of manufacture from being obtained by unlicensed third parties.
- 25. The obligations of Peck and Ruddle therein to Shell or its assignee shall be joint and several and shall be binding upon their executors, administrators, heirs, and legal representatives.
- 26. Promptly upon the execution of this agreement Peck and Ruddle will inform Shell Oil in writing as to the name and address of the party to whom statements, payments, notices, etc., under this agreement shall be sent, and the sending of such statements, payments, notices, etc., by registered mail to said named party at the given address shall be considered as delivery to Peck and Ruddle until further notice in writing.
- 27. If Peck and Ruddle at any time fail to appoint a party to whom all statements, payments and notices are to be sent, then Shell Oil will send such statements and notices to each of Peck and Ruddle and will pay one-half of any royalty due upon this agreement to each of Peck and Ruddle, and such payment shall be considered as payment within the terms of this agreement.
 - 28. Peck and Ruddle and Shell Oil will keep

Plaintiff's Exhibit No. 3—(Continued.) each other informed of any improvements of said product or its method of manufacture.

- 29. Shell Oil will grant unto Peck and Ruddle a non-exclusive, free license until the notice of termination of this agreement under any improvements it or its affiliated, subsidiary and parent companies may make in Core-Min-Oil together with the right to sub-license. Any sublicenses granted under this article by Peck and Ruddle before notice of termination of this agreement shall remain in force.
- 30. In the event Peck and Ruddle desire to sell the patent right on Core-Min-Oil they will first offer the same to Shell Oil at the bona fide price offered by a wholly independent third party.
- 31. This agreement is not assignable except that Shell Oil may, at its election, assign the agreement to one of its affiliated, subsidiary or parent companies. Upon assigning the agreement as provided in this article Shell Oil will remain liable under its obligations herein until its assignee gives notice in writing to Peck and Ruddle that it will assume the obligations of this agreement.
- 32. Wherever used in this agreement, the term "Core-Min-Oil" shall mean the core binding composition containing asphalt emulsion coming within the claims of any pending application or issued patent owned or controlled exclusively by Peck and Ruddle.

Plaintiff's Exhibit No. 3—(Continued.)

- 33. The term "affiliated, subsidiary and parent companies" shall mean the Shell Union Oil Corporation, a Deleware corporation, its subsidiary and parent companies and the subsidiaries of said parent companies throughout the world and the companies managed or controlled by one or more of them.
- 34. The term "parent company" shall mean a corporation which owns or controls directly or indirectly not less than 50% of the voting stock of another corporation, said latter corporation being a "subsidiary company".
- 35. The term "United States" as used herein shall include not only continental United States but also Alaska, the Hawaiian Islands and all territory which, during the term of this agreement, is subject to the jurisdiction of the United States and either included in the patent grant or to which the rights of United States patents may be extended by mere registration.

In Witness Whereof, the parties have caused these presents to be executed in counterpart originals as of the day and year first above written.

Plaintiff's Exhibit No. 3—(Continued.)

LYDELL PECK
ALLAN B. RUDDLE
SHELL OIL COMPANY

D_{TT}		
By		
	President	
$\mathbf{B}\mathbf{y}$		
	Secretary	

Witness:

James F. Peck of San Francisco, California, hereby agrees declares that he has no interest in the above agreement and the subject matter thereof and consents and approves of its execution.

Signed at San Francisco, California, this ... day of, 1938.

JAMES F. PECK

Wit	n	e	S	S	:													
									•									

Mr. Hackley: Q. One of the things, Mr. Mc-Swain, that I notice is recurrent in here is that the contract is broadened in its language by your insertions of the phrase which occurs first in paragraph 2, "and other compositions for foundry use", Now, that apparently as it was originally written, I am reading the typed portion only, read: "Shell Oil shall diligently attempt to sell Core-Min-Oil as covered by said patent applications or later patents." And re-written the paragraph with your

insertion in it reads: "Shell Oil shall diligently attempt to sell Core-Min-Oil and other compositions for foundry use as covered by said patent applications or later patents." [736] Do you recall any specific discussion resulting in that amendment?

- A. I don't recollect the specific discussions relative to that, other than the fact that certain other uses for Core-Min-Oil, supposed or possible uses, had been discussed.
 - Q. That is all you remember about that?
- A. Well, that was the fundamental reason for the clause being inserted.
- Q. You observe, of course, in making that last statement, that this phrase we are referring to doesn't refer to other uses for Core-Min-Oil, but refers to "other compositions for foundry use."
- A. That does not alter the fact it was due to the fact that Core-Min-Oil presumably had been discussed and that was included to cover all possible uses in a foundry for Core-Min-Oil.
- Q. I show you a document and ask you if you can identify it. A. I remember it.
 - Q. Is that your handwriting? A. Yes.
- Q. Entirely, with the exception, I presume, of the phrase written at the bottom which says "Written by Floyd McSwain."
 - A. That is not my handwriting.
- Q. Other than that last phrase, however, it is entirely your handwriting?
 - A. I would say so, yes.

Mr. Hackley: I offer the document identified by the witness as Plaintiffs' Exhibit 4.

(The document was marked "Plaintiffs' Exhibit 4.")

[Plaintiffs' Exhibit No. 4 is set out as Plaintiffs' Exhibit No. 7 on page 1553 of the book of Exhibits.]

Mr. Hackley: Q. Do you remember discussing with Mr. Peck and Mr. Ruddle, or either of them, prior to the execution of the contract, the fact there was room for additional development work on this product, and that they conceded that because of lack of first-class laboratories they were not able to reach the highest state of development of the product?

- A. Well, I don't like that word, that "there was room." It was [737] an undeveloped product.
- Q. It was recognized by both Shell and Peck and Ruddle that there was work to be done?
 - A. It was recognized by ourselves.
- Q. Well, there was no question that Peck and Ruddle also conceded that to be true?
- A. Well, that is a reasonable assumption. It didn't work.
- Q. You say "reasonable." There was work to be done? A. Yes.
- Q. You say it didn't work. You are talking about what? When was that determined?

- A. At the time they brought it to us. That is the time you are referring to?
 - Q. Why do you say it wouldn't work?
- A. Because there was no sureness in their getting cores that was even reasonably satisfactory.
- Q. It was determined that failure occurred when it went into a CO2 oven. I mean by that an open gas oven.
- A. It was determined that that was one of the reasons.
- O. What other reasons were there that you know of of your own knowledge at that time, prior to signing the contract?
- A. The degree of hardness and strength of the cores was a most uncertain factor.
- Q. Do you remember assuring Peck and Ruddle before the execution of the contract that the Shell Oil Company, of course, would have to do a great deal of development work on this product?
- A. 'Well, it is quite likely that I told them that that was the case, because it was—
 - Q. Do you remember assuring them of that?
- A. At least that we would have to do some development work. We didn't know at the time just how much, or how extensive it would be.
- Q. That whatever work that was done along that line would fall within the terms of the contract and react to the benefit of Peck [738] and Ruddle?

- A. No, I don't recall that statement was ever made.
- Q. You would not say it was not made, would you?
- A. I don't recall there was any conversation relative to its being brought under the terms of the contract, any of the research work we did.
- Q. Do you remember that Mr. Ruddle brought up the subject, some feeling of apprehension that in your work you might develop a product which was competitively superior to that which they had and he visualized the possibility that all his work would go for nothing, and for that reason you would market your own product and neglect his?
 - A. No, I don't.
 - Q. You do not recall that, at all?
 - A. No, I do not.
 - Q. What do you recall along that line?
- A. That there was a discussion as to its being developed out of his possession; in other words, his knowledge of chemistry was, I might say, rudimentary.
 - Q. Well, he conceded that, didn't he?
 - A. Well, I don't know that he conceded it.
 - Q. He didn't have to, it was obvious?
- A. It was quite obvious that with our superior technical assistance we might take his secret formula, which was the thing he talked about chiefly, and developing from that take it away from him. That was my understanding.

- Q. That was the apprehension he had?
- A. That was the apprehension.
- Q. What did you do to reassure him that that wouldn't occur?
- A. Well, it is quite likely that I assured him the Shell Company was an honest concern.
 - Q. Didn't go in for that sort of thing?
 - A. No.
- Q. As a matter of fact, you remember, don't you, assuring him of just that?
- A. Well, yes. I can't tell you when, or the [739] particular circumstances, but I am quite sure that I assured him of that.
- Q. Do you remember discussions of a core wash, that is prior to the execution of the contract, that had been developed by Peck and Ruddle?
- A. Well, there were discussions of core wash. I don't recall any specific discussion. There were undoubtedly many of them.
- Q. Do you remember that Mr. Ruddle contended that he had worked out a superior core wash?
- A. Well, I won't say he had worked it out. He had tried one.
- Q. Do you remember it was demonstrated to your company?
- A. I don't recall the circumstances surrounding that demonstration to our company. As I recall it, Ruddle told me of a demonstration which he had made for the superintendent, or the foreman of the

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) core men at Vulcan, and his explanation was that

it was quite a satisfactory core wash.

- Q. Do you remember that Mr. Peck and Mr. Ruddle wanted to keep that core wash development out of this present contract, so they would be free to deal with somebody else on that?
 - A. I believe that they did.
- Q. Do you remember that your company insisted on that being included in the deal when the contract was made?
 - A. I think we did that.
- Q. Do you remember, as a matter of fact, that your company insisted on their going into the thing, that Peck and Ruddle include anything they might develop in the foundry field and not of giving you one part of their work and holding out something else?
- A. Well, I don't know that I would say anything in the foundry field. I believe the discussions were all——
 - Q. Well, anything for foundry use.
- A. No. Core-Min-Oil for [740] foundry use, that is the thing that they had brought to us.
- Q. Along that line do you remember now that in the preamble of this contract, the draft, Exhibit 3, you added to that preamble a phrase, I am going to read the whole paragraph and then indicate when I start reading the addition:

"Whereas, Peck and Ruddle warrant they are the owners of all right to a new and useful core

binding composition, hereinafter referred to as Core-Min-Oil, consisting of two components, a secret solution and asphalt emulsion". That is as it was originally written. Then you added, "and to new compositions for other foundry uses such as core covering."

- A. Is that the end of the paragraph?
- Q. That is the end of the paragraph.
- Mr. Aurich: Let me see that, please.

Mr. Hackley: If you want to check that, I tried to read it accurately. Well, it is probably easier for you to discuss it if you have it in front of you.

The Witness: All right. What is the question?

Mr. Hackley: And then I read the paragraph to you and the addition of that phrase. Refreshing your recollection let me ask you for your purpose in providing for the inclusion in the contract of anything that Peck and Ruddle developed by way of compositions for foundry uses.

- A. Well, I don't know what the intent of the contract was, but it was not my intent at the time that was written in.
- Q. I am not asking you to construe that contract. I am trying to get your full recollection.
- A. My recollection is the core covering referred to was a mixture of Core-Min-Oil, their formula, with something else, and that was what was in mind, at least it [741] was in my mind.

- Q. Do you recall that after you had reached the point where provisions were drawn calling for Peck and Ruddle to put in these other things that they might work out for foundry use that you, in turn, on behalf of your company, said that your company would, of course, throw in anything that they discovered pertaining to foundry use generally in any particular contract?

 A. I do not.
 - Q. No recollection of that, at all?
- A. I most certainly have no recollection on that score.
- Q. I will read to you as amended your insertion of paragraph 7, as it appears in this draft, Exhibit 3:

"Shell Oil agrees that it and its affiliated, subsidiary and parent companies in the United States will pay as royalty to Peck and Ruddle on all their sales of Core-Min-Oil and other compositions for foundry use" and so forth.

Does that refresh your recollection on the inclusion of other developments by Shell under this contract?

A. It does not.

Q. You still adhere to your original position on that?A. Most assuredly.

(A recess was here taken until two o'clock p. m.) [742]

Afternoon Session 2:00 o'clock.

JOHN FLOYD McSWAIN,

Direct Examination (Resumed).

Mr. Hackley: Q. This morning I requested a number of documents. Did you locate those things during the noon recess?

- A. I looked through my files and found the reports that you asked for.
 - Q. Have you got those here?
- A. No. I found TAC No. 79 and 90, which I understand you already have.
 - Q. That was all you located? A. Yes.
- Q. I think we have those. Those are the reports, respectively, of February 24, 1938 of E. H. Spotswood and L. J. Snyder, and March 22, 1938, by E. H. Spotswood?
- A. They were by Spotswood, I didn't note the date.
- Q. Showing you Exhibit F-1 annexed to the complaint in this action, and I am not asking you to verify that that is identically the same thing, although it is intended to be a copy of the document, of TAC 79, does that appear to you to be what you just referred to?
- A. Well, it appears to be. I did not read the report.
 - Q. TAC 90, dated March 22, 1938, is F-2 an-

nexed to the complaint, and appears to be a report by Mr. Spotswood.

- A. It also appears to be the same. I did not read either of them.
- Q. You found no other reports prior to the execution of the contract in any of the records?
 - A. No.
 - Q. At your office.
 - A. Well, none in my files.
- Q. Is there any chance that reports may have been made that are not in your files?
- A. Well, I don't know. I question that being the case. [743]
- Q. You think at that stage, at least, everything would have come to you?
 - A. Everything would have come in the files.
- Q. In other words, you were the one generally in charge of these negotiations, I guess, at that time?
 - A. Yes.
 - Q. Do you know Harold Martin?
 - A. The Manager of the Vulcan Iron Works?
 - Q. Yes. A. Yes.
- Q. Did you write a letter to him relating to this subject?

 A. I don't recall.
- Q. Do you recall writing to Mr. Martin and telling him on behalf of your company that you would underwrite any loss that they suffered in spoiled castings, something like that?
- A. I don't recall writing a letter on it, although that was our attitude.

- Q. You have no current recollection of that letter? A. No.
- Q. You were in very frequent contact with Mr. Ruddle or Mr. Peck, or both of them, during the period leading up to the signing of the contract, were you not?
- A. Yes. I don't know just what you mean by "frequent."
- Q. Well, perhaps as much as once a week you ran into them?
 - A. Oh, probably that often, possibly oftener.
- Q. That is what I had in mind by "frequent," that it would be as often as that. A. Yes.
- Q. Those negotiations continued over a period from the latter part of 1937 until the contract was signed on April 8, 1938; is that correct?
 - A. Yes.
- Q. Following execution of the contract, itself, which appears to be Exhibit B to the complaint in this case, what was done with reference to performance of the contract, to your knowledge?
- A. Well, just what do you mean by "performance"? [744]
- Q. Well, the contract, itself, has a number of requirements on the part of the Shell Oil Company, things that they are to do. I think if we will probably turn to the contract it would simplify your answer. Take paragraph 2. It provides that Shell Oil Company shall diligently attempt to sell Core-

Min-Oil and other compositions for foundry use as covered by several patent applications, or later patents. What did the Shell Oil Company do, to your knowledge, to conform to the requirement of diligence in that paragraph?

- A. Well, I don't know how to answer that question. We never had a marketable material, so just how much diligence we displayed in marketing I couldn't describe.
- Q. You say you never had a marketable material. What do you base that statement on?
- A. Well, we never had a material that would be acceptable in the foundries for use.
- Q. Have you any facts to go on on that, or is that a matter of your opinion?
- A. Well, that is a matter of my opinion, supported by the work that was done, the facts that were determined in the foundry.
- Q. Going back a little bit for a moment, you recall, do you not, that when this product was brought to you by Ruddle it comprised a portion of the later material known as the Ruddle Solution, and it was designed to be—the Ruddle Solution was designed to be mixed with asphalt emulsion in certain stated proportions to produce a core oil?
- A. Well, not in stated proportions. Those proportions were still indefinite.
- Q. Would you say Peck and Ruddle gave you no proportions to use?

- A. No. They suggested proportions which, I think, were used and afterwards we had to depart from.
- Q. Have you any record to support that statement other than the record of the reports that were given to Peck and Ruddle here in [745] recent months? A. No.
- Q. Are you familiar with all these reports annexed to the complaint, the TAC reports?
- A. No; I am not sure that I have read them through carefully, because I was interested in results and that was technical matter.
- Q. If we wanted to get information of that sort we would have to go to men like Mr. Spotswood, or Mr. Spiri?
- A. Well, Spotswood is the man who made the report.
- Q. How about Mr. Spiri, what did he have to do?
- A. Spiri's work was chiefly in the foundry, actually making cores.
 - Q. At Vulcan? A. At, I think, Vulcan.
 - Q. What about Snyder?
- A. Well, I don't recall. I think Snyder only—Snyder was in charge of the department in which Spotswood worked, I think. He signed the report, but I think his personal contact with the work was extremely limited, if he had any contact with it at all other than just reading the report.

- Q. Is Snyder a superior of Spotswood in the organization?

 A. He was at that time.
 - Q. He was at that time?
- A. Yes, and still may be. I don't know what his position is.
- Q. I notice, for example, on report F-2, it is signed "E. H. Spotswood," and "Approved, L. J. Snyder." The impression I had there was that he was a superior.
 - A. Well, I think it was a perfunctory approval.
- Q. You don't think he had any independent knowledge of this transaction?
 - A. I don't think so.
 - Q. What about G. E. Warren; who was he?
- A. G. E. Warren, well, he is the No. 1 man in the asphalt laboratory, although I am not sure he is a TAC man, but he has the same work, at least a certain [746] amount of direction over Spotswood.
 - Q. What does "TAC" mean, by the way?
 - A. Technical application.
- Q. Is he a superior of Spotswood, or does he work in a different field?
- A. No; he has a somewhat different department. I think he usually wrote reports.
- Q. I notice here in this report F-3 that Mr. Snyder signed approval of the Warren report.
- A. Well, he would have been superior to Warren.
 - Q. And who is W. J. Yates?

A. Yates is in charge of what we call the control laboratory at Martinez.

Q. Where?

A. At Martinez. I may be a little vague on some of these titles, because that is the manufacturing department.

Q. Does Yates rank Snyder, or not?

A. I couldn't say whether he does or not.

Q. Who is R. W. McOmie?

A. Well, I don't think I could give you his title. I think he is in charge of engineering.

Q. I notice he signed report F-10 as approving the work of Spotswood.

A. I can't tell; some of those fellows shift around over there, and they transfer them back and forth to various departments. I can't keep up with them.

Q. Who is C. H. Britten?

TAC Committee, which was in charge of all TAC activities.

Q. You say "was". Is he with your concern now? A. Yes.

Q. In the same capacity, or not?

A. I don't think so.

Q. All these men are still with the Shell Oil Company, are they not, or one of its affiliates.

A. As far as I know.

Q. Mr. L. G. McLaren is still Vice-President of the company?

A. I suppose he is; I don't know.

- Q. Do you recall the discussions of the so-called single package that went on in this development work with the Peck and Ruddle [747] product Core-Min-Oil?

 A. Single package, meaning what?
- Q. Well, by that I mean, I understand that would be the use of a phrase, you correct me if you don't think what I am stating is right, to define the inclusion of the Ruddle solution and asphalt in a single package or unit for sale as a unitary product.
 - A. Well, that was discussed at various times.
- Q. That came up. That was quite a problem before the contract was ever signed, was it not?
- A. I don't think it came up as a problem. It came up as a possibility.
- Q. At the time Mr. Ruddle came to you he had no means of putting his asphalt and his solution in the same package for storage by Shell, or anything of that sort; isn't that true?
- A. I don't know whether he did or not. He didn't tell us if he did.
- Q. Well, as a matter of fact, it appeared exactly the contrary, namely, that he couldn't seem to get those two products into a single package and keep them from breaking down in the emulsion; isn't that so?
- A. I believe he told us he had tried to do that and had not succeeded.
- Q. During the period your company worked in the laboratory on this subject they spent a great of time and effort trying to, using different plans to

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) put these two products into a single package; isn't that true?

A. Yes.

- Q. What do you understand to be meant by "single package," as you use the phrase?
- A. As I understand you to mean, it is a mixture of, as we were finally working it, sodium silicate and asphalt emulsion.
- Q. Which would hold in an unseparated condition for certain lengths of time in a single package?
 - A. It would have to be useful.
- Q. What do you mean, it would have to hold in a single package [748] to be useful?
- A. Well, we mean it would have to hold, have to be in a single package to be useful, but if you are putting it in a snigle package it would have to remain in the state it was placed in it to market it.
- Q. If you put the product into a single package and it wouldn't hold the condition of emulsion that was established on the creation of the product, in other words, if that broke you would have no practical means of re-mixing the product out in the field?
 - A. No, as far as I know.
- Q. Your laboratory spent a great deal of time there trying to find an answer to that problem, to make it hold as a combined product in a single package, carton?
 - A. May I have that question? (Question read.)
 - A. They worked on that.

- Q. Was that problem ever solved?
- A. As far as I know, not.
- Q. As a matter of fact, your attempt to cancel the contract in July, 1939, was based on your failure to get the product to hold in a single carton, was it not?

 A. I don't think so.
 - Q. Did that influence the decision?
 - A. Well, I have not determined that.
 - Q. So far as you know.
- A. Well, we were unsuccessful, as far as they reported to me, in making an emulsion of sodium silicate and asphalt.
 - Q. An emulsion that would not break down?
 - A. Yes.
- Q. On standing. However, I suppose you concede that if you take the Ruddle solution and asphalt and mix them, and use them promptly after the mixing has occurred, you can produce a superior core?

 A. No.
- Q. Then what does your report of February 24, 1938, TAC 79, mean [749] when on page 2 it says, "Satisfactory cores may be prepared by using the Special Solution and Y-104 mixed with sand, care being taken to exclude HO₂ when drying in gas ovens"?

Mr. Aurich: You don't mean what this witness' report means?

Mr. Hackley: No, this is not this witness' report.

Mr. Aurich: Will you read the question?

Mr. Hackley: I will strike the question and I will re-ask it. I will start it this way:

- Q. Are you able, Mr. McSwain, from a technical standpoint, to analyze the reports of Mr. Spotswood which were submitted to you prior to the signing of this contract?
- A. Well, I couldn't say. I have undoubtedly seen the report but I don't know just what the report contains, and I wouldn't undertake to say at this time that I could.
- Q. Did those reports have any influence on you in advising the company to enter into a contract with Peck and Ruddle?
- A. Possibly; not necessarily the reports, but the verbal condensation of the reports did.
- Q. Do you consider yourself to be technically qualified in the art of core making?

 A. No.
 - Q. And core binding? A. No.
- Q. You have got a good technical department there to answer those problems for you, have you?
- A. Well, we have a technical department, only our technical department is not necessarily a foundry technical department. Our men are, primarily, petroleum engineers.
- Q. In entering into this contract, Exhibit B to the complaint in this case, were you influenced by the phrase appearing on page 7 of the report TAC 79. Exhibit F-1 to the complaint, which reads: [750]

"Satisfactory cores may be prepared by using the 'Special Solution' and Y-104 mixed with sand, care being taken to exclude CO₂ when drying in gas ovens."?

- A. Was I influenced by that clause?
- Q. Yes. A. I couldn't say that I was.
- Q. You were familiar with that report, though, in a general sense?
- A. As I say, I was familiar with the verbal summary of the results rather than any particular paragraph or line in the reports.
- Q. You had before you at the time you entered into this contract, or assisted the company in completing the negotiations and the signing of such contract, the report TAC 90, of March 22, 1938; is that correct? A. You say I did?
 - Q. Yes.
- A. Well, I don't recall that I did. I don't recall the report, at all. My judgments were formed by the verbal reports from the men.
- Q. Now, do you recall those verbal reports well enough to report them now?
 - A. I can't recall any of the individual reports.
 - Q. Who were they from, what men?
- A. They might have been from Spotswood, personally, might have been from Waller, personally, might have been from Harsch, personally.
- Q. Would you say, as a matter of fact, the reports you have reference to were from these men?

- A. Well, not exclusively; some of them might have been from Ruddle.
- Q. But you did have reports from Spotswood, Waller and Harsch?
 - A. Yes, progress reports.
- Q. You said a moment ago you did not recognize a superior character of the product brought to you by Peck and Ruddle, yet TAC 90 dated March 22, 1938, that is several weeks before the contract was signed, carries the following, and I quote from page 9 of the [751] report, I will read just the conclusion:

"The curing of cores prepared from 'Special Solution', Y-104, and sand, in CO₂ free ovens can be done in one-third the time required for cores of the same size and shape prepared with Houghton Oil and sand. Cores prepared with either Houghton Oil or Lin-Oil cure in the same length of time while cores prepared with Linseed Oil cure more slowly.

"The drying time required for cores of various shapes does not correlate with area, volume or weight of the core. Variations in temperature affect the drying rates of the cores, although increases in temperature above 400° yield small savings in time. The most desirable drying temperatue is 400° F. to 500° F.

"Varying the proportion of Premix Emulsion to 'Special Solution' (i. e., increasing the amount of Y-104 and decreasing amount of

'Special Soluton') changes the strength and friability of the cores after they have been exposed to heat, equivalent to that of molten metal present during the pouring of the casting in the foundry.'

How do you reconcile your statement in light of what I have read from that report?

- A. I don't recall the statement that I made.
- Q. I don't desire to misquote you there. I will ask the reporter to go back and find that statement and read it.

(The following question and answer read by the reporter:

"Q. However, I suppose you concede that if you take the Ruddle solution and asphalt and mix them and use them promptly after the mixing has occurred you can produce a superior core?

A. No.")

The Witness: I meant to say I did not recall making the statement.

Mr. Hackley: In the light of what we have just read back from [752] the record do you want to add to your answer?

- A. I do not see that I have any change to make in my reply at all. One question was asked in the present tense and this last question was referring to something that happened at the time, prior to the signing of the Peck and Ruddle contract.
 - Q. To make the thing perfectly clear, if the pro-

duct of Peck and Ruddle was good in the spring of 1938, prior to the signing of the contract, it is equally good to-day?

Mr. Aurich: I object to that as argumentative.

The Witness: My reply is that is your conclusion.

Mr. Hackley: Q. Well, what is yours?

A. Let me ask what we are talking about now, what is my conclusion?

Mr. Hackley: Will you read my question to the witness?

(Question read.)

Mr. Hackley: I will repeat the question.

Q. As I understand this debate we are having at the moment, Mr. McSwain, you are raising some issue about the use of the present tense in the earlier question on this subject and the past tense in the latter question. So there will be no confusion I am going to take this thing up again in consecutive order and see if we can simplify it.

A. All right.

Q. When Peck and Ruddle came to you with this product in 1938, if I understand your testimony heretofore correctly, they had a product which they concededly did not know how to put in a single package. By "single package" I mean the emulsifying of the asphalt and the Ruddle Solution so it would hold against breakdown on standing.

A. So they told me.

Q. They contended that the product they had

then would make a successful core; that was the manner in which they interested you people in the product, itself; isn't that correct?

- A. No. [753]
- Q. Go ahead, give your own explanation.
- A. They contended it would make a successful core sometimes.
- Q. They said there were occasions when they failed in that respect? A. Yes.
- Q. Your position on that is that such failures occurred at least in some instances when they were working in ovens in which CO₂ gas was present, that is, an open gas oven?

Mr. Aurich: You mean at the present time his position is that?

Mr. Hackley: No. We are talking about Mr. McSwain's state of mind back there in 1938.

Mr. Aurich: May I hear the question, please? (Question read.)

The Witness: Yes.

Mr. Hackley: Q. And I believe it is your contention that in the testing work done with this Peck and Ruddle product, Core-Min-Oil, prior to the signing of the contract, your laboratory discovered that the product failed in the presence of CO₂ in the oven? A. Yes.

Q. Now, at the same time, you concede that when it was mixed from separate sources, the solution on one hand and the asphalt on the other, and then

used to make a core, and was fired in an oven free of CO₂ gas a superior core to that of the several types mentioned in the report TAC 90 I read a moment ago resulted, and that was the determination of your company in the period prior to the signing of the contract?

- A. You mean we conceded at that time—
- Q. Yes.
- A. In so far as we had gone we knew the cores made from it baked in an oven containing CO₂ gas—that was not all the problem.
- Q. So far as you had gone at that time you had demonstrated that [754] when you overcame the problem of CO₂ gas, and you weren't concerned about trying to put the product in a single package, you were able with the Core-Min-Oil to produce a superior core?

 A. Well, it looked promising.
 - Q. You don't want to go any further than that?
 - A. No.
- Q. Of course, you don't desire at this time to retract anything that you said in the report TAC 90?
- A. Well, I don't know that I am called on to retract what is in the report. Well, that report was quite preliminary.
- Q. What occurred subsequent to the signing of the contract that rendered this otherwise promising product, if I understand your attitude to-day, to be of no value?
- A. Well, that question sounds extremely general to me. What do you mean by "what occurred"?

- Q. Well, I am trying to get you to tell me—Well, we might try it this way: To-day it is your opinion that Core-Min-Oil is of no value?
 - A. Correct.
 - Q. Why do you hold that opinion?
- A. Because of the variability in the cores which we were not able to overcome.
- -Q. Have you any reports that demonstrate that, reports or tests? I suppose you conducted tests to demonstrate that?
 - A. I don't recall what the reports cover.
- Q. You would not want to hold yourself out as a technical expert on those reports, anyway, you would rather have the men who wrote them construe them, would you not?
- A. I have no preference in that matter at all. My feeling is that I can't construe those reports. I am not a technical man, certainly not a foundry man.
- Q. What influenced you in deciding that the product was of no value other than the claim you just made that the product had [755] variable results?
- A. Well, that was the chief difficulty; the results were so variable that we did not have a marketable product.
 - Q. Why were they variable?
- A. That is another technical matter that I cannot answer.
 - Q. Well, strictly as a layman, of course, we

would expect under equal conditions to get equal results consistently. Is it your contention that under equal conditions you got variable results, or varying results?

- A. That still gives way to some probability. I don't know whether the conditions were always equal, but conditions in a foundry are never equal.
- Q. As a matter of fact, in reading the reports which appear as Exhibits F-1 to F-13 annexed to the complaint it is perfectly clear that there were no two tests performed alike, and that the results were different from time to time.

Mr. Aurich: I suggest this witness said he has not read the reports.

Mr. Hackley: I think that is clear.

- Q. Can you verify that or not, and it will depend on whether you are familiar with the reports.
- A. Well, I am not sufficiently familiar with the reports to verify that.
- Q. Who would be the man in your organization that could unequivocably answer that class of question, Mr. Spotswood?
- A. Well, I don't know whether Spotswood would be the man or not.
 - Q. If it was not Spotswood, who would it be?
 - A. I can't imagine.
 - Q. Spiri?
- A. I don't know whether Spiri signed any of these reports, or not.

- Q. Yes, he signed one of them here. As a matter of fact, I can tell you which one if you like. Mr. Spiri, for your information, signed the report of April 13, 1939, which is Exhibit F-13 to the complaint. That is authored by E. H. Spotswood [756] and W. H. Spiri, according to the report, and is TAC 561. Does that information vary your answer at all?
 - A. Well, what was my answer?
- Q. Your answer was that you were not sure whether Spiri signed any reports or not.
- A. If his signature is on the report I think the answer is self-evident.
- Q. I am trying to find out where we would get this information that we are seeking as to the technical conclusions reached on the technical efforts during this period of the contract, from the time the contract was signed until you attempted to abandon it in July 1939?
- A. The conclusions, the final conclusions were reached by me.
- Q. So perhaps you can help, then. Do I understand that the decision to abandon the contract, or attempt to, was your conclusion?

 A. No.
 - Q. That certainly was a final conclusion?
- A. Well, I meant by "final conclusion", you were discussing the period, as I understand it, prior to the signing of the contract.
 - Q. In the period prior to the signing of the

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) contract the conclusion to enter into the contract

was reached by you?

- A. Well, not finally by me. All I could do was to make a favorable report on the reports verbally.
 - O. And make a recommendation?
 - A. And make a recommendation.
- Q. Who reached the conclusion to abandon the contract, or attempt to?

 A. I don't know.
 - O. You have no information on that?
 - A. No.
- What do you know about what your organization was doing between April 8, 1938, and the date you sought to abandon the contract, the notice of July 26, 1939, Exhibit D to the complaint?
 - A. What were we doing? [757]
 - Q. Yes.
- A. Well, in general, we were spending considerable sums of money in carrying on continuous work trying to develop Core-Min-Oil into a marketable product.
- Q. Who knows about those reports specifically as to what was being done during that period?
 - A. Oh, I couldn't say.
- Q. Whom would you think among the men who worked on this thing had the greatest single information on the subject, Mr. Spotswood?
- A. I couldn't say that; both he and Spiri worked on the proposition, and I don't recall now which had the major part of it. They carried on different phases of the work.

- Q. Well, if we were to interview both Spotswood and Spiri we would probably get a pretty fair cross section of all of that work, is that correct?

 A. I don't know.
- Q. Would you say that would be true from your knowledge?
- A. Well, I still don't know. I think they are the ones who will have to give you that information.
- Q. How much of the time and effort spent in that period between April 8, 1938, and July 26, 1939 was spent in trying to find some kind of a container, or emulsifying the Ruddle solution and asphalt so it wouldn't break down in one package?

 A. I couldn't say.
- Q. You know a good deal of effort along that line was made?
 - A. A good deal of effort was put forth.
- Q. Why was it advantageous to your company to get those products into one package?
- A. Because when the proposition was brought to us of a secret solution, it depended upon a secret solution, and the secret solution proved to be of no value whatever. It was a mixture of emulsion and sodium silicate that had no value. If there was any value at all the value was that it could be marketed and pay a return, or pay anything, and to [758] make if profitable would be to market it as a combined product, else you threw it wide open to every emulsion manufacturer and every

Plaintiffs' Exhibit No. 38 for Identification (Cont.) (Deposition of John F. McSwain.) sodium silicate manufacturer. We found that we

had no patent protection.

- Q. You are familiar with the fact, of course, that letters patent have issued since on the product that Peck and Ruddle submitted to you in 1938?
 - A. No, I haven't heard anything about it.
- Q. For your information, patents have issued, Mr. McSwain. Are you familiar with any patent application that was filed during the period that the contract was in force, in the name of Spotswood and Ruddle? A. No.
- Q. There was a patent application filed in the name of Spotswood and Ruddle as joint inventors. You have no information on that?

 A. No.
- Q. You don't know, then, that that application has issued into letters patent? A. No.

Mr. Hackley: Off the record.

(Discussion off the record by direction of counsel.)

Mr. Hackley: Q. Was any effort ever made to sell the Peck and Ruddle product commercially?

Q. Was any effort ever made to sell the product to foundries in the form in which it was brought to you by Peck and Ruddle, that is, a solution, on one hand, and to be combined with asphalt emulsion on the other, to produce a product called Core-Min-Oil?

A. No.

- Q. All your efforts were such as might have been, or might be said to have been confined to laboratory and foundry work.
 - Q. Laboratory and foundry work?
 - A. Yes.
- Q. Which you would class as of an experimental nature, perhaps? [759] A. Yes.
- Q. And you, as an individual, are not at this time able to tell us the scope or exact nature of that work?
- A. No. It covered too long a period and too many experiments.
- Q. Do you recall a conversation with Mr. Ruddle shortly after the signing of the contract on April 8, 1938, in which you told Mr. Ruddle in substance that your company was concerned with putting the two products, asphalt emulsion and Ruddle Solution, into one package, and that you were working in the laboratory trying to achieve that result? By "you," I mean your company; I don't mean you, individually.
- A. Well, I don't recall the specific conversation. We had almost daily conversations covering a long period, just ran together in a kaleidoscopic fashion. All that I can recollect of these things is the general impression that came out of them.
- Q. You recall that that was brought to Ruddle's attention at some point in there, but you could not fix the exact time; it probably was discussed many, many times, as a matter of fact?

- A. It is quite possible.
- Q. Do you recall that in some one of those conversations that you brought out to Mr. Ruddle's attention the fact that some law prohibited the use of an article which is patented to control the sale of an unpatented article, as asphalt emulsion, and that, therefore, unless you could get this stuff into one package, this whole thing into one package, you would not be able to force the use of your asphalt by anybody using the patented solution, the Peck and Ruddle solution; do you remember the substance of a conversation like that?
- A. No, I do not. We had conversations relative to the putting of the emulsion in one package, but when those conversations came up, I don't recall [760] whether it was after we had determined that the Ruddle Solution had no value, or whether it was before that time. As I recall it, it was after we determined that the Peck and Ruddle Solution as such had no value that we became particularly interested in the marketing of the product in one package, although it is possible that it may have come up prior to that, as a matter of convenience of what could be done.
- Q. Do you recall discussing the legal problem of trying to force your customers to use your asphalt if the patent only covered the solution?
 - A. Well, I don't recall the conversation.
- Q. You recall there was a discussion of that general subject?

- A. There was some discussion, or there was considerable discussion of the subject, but I have no recollection of the specific conversations.
- Q. Do you remember pointing out to Mr. Ruddle that if you could get this product into one package you could get a higher price for the combination product that you could for either part of it alone, and it would be more profitable for both of you?
- A. What are you talking about, the Peck and Ruddle Solution and emulsion, or sodium silicate and emulsion?
- Q. Well, let's take Peck and Ruddle's Solution first.
- A. No, I don't recall that that conversation had to do with Peck and Ruddle Solution and asphalt emulsion.
 - Q. Well, you did have such—
- A. In fact, I don't recall the specific conversation relative to that subject.
- Q. What I am interested in here is the fact you did discuss the general subject. I am not trying to pin you down to any specific conversation.
 - A. It was discussed, yes.
- Q. During this period from April 8, 1938, to October 8, 1938, [761] the six months' option period provided by the contract, you recall that period?

 A. Yes.
 - Q. In general, what was the nature of the work

being done by your company in relation to this subject?

- A. As I recall, we carried on various cross bending strength tests; we carried on experimental work at the Vulcan Foundry. I don't recall whether that was done simultaneously or not.
- Q. That was a period of general testing of the Peck and Ruddle product in an attempt to find out how good, bad, or indifferent the product was; is that about it?
 - A. Well, we were trying to make the product.
- Q. Well, you had a six months' period under the contract within which you could either take up a contract with the five-year minimum term or give the thing up without penalty?

Mr. Aurich: I think the contract will speak for itself.

Mr. Hackley: I don't want to ask you to construe the contract, but you can look at it, if you prefer, and I certainly don't want to misquote it. Have you any uncertainty on that, Mr. McSwain?

A. Well, only as to the phraseology.

Mr. Aurich: You are referring to paragraph 22 of the contract?

Mr. Hackley: Yes; paragraph 11 and paragraph 22, that option period. Will you read the question, please?

(Question read.)

Mr. Aurich: Yes, answer the question.

The Witness: Well, I have just read the clause.

Mr. Hackley: Well, did you hear the question?

- A. I heard the question, but does this call for an interpretation on my part of the contract?
- Q. Not a bit. That is the best answer you can give to that question?
 - A. Well, I cannot interpret the contract. [762]
- Q. Why didn't you surrender the contract at the end of the option period, or during the option period?
 - A. Well, that is a matter that I cannot reply to.
 - Q. Who made that decision?
- A. Well, that was made by someone superior to me; I couldn't say who made the decision.
 - Q. Mr. McLaren? A. I don't know.
- Q. Who would know that? In other words, where can I get the information?
 - A. I don't know that.
- Q. Well, I don't want to search the entire company, starting with the top and working down. I should imagine there was some method of you discovering that?
- A. I don't know who made that decision. It was made by someone superior to me. I don't recall just where the decision came from, how it came to me.
- Q. You are familiar with the fact that after three ten-day extensions of the option period requested by your company the option was exercised and the contract went into force?

- A. There were some extension periods, I don't recollect for how long.
- Q. What were the reasons that you gave from time to time to Mr. Ruddle when he contacted you at the rate of probably once a week, or more——
 - A. Once a day.
- Q. From April, 1938 to July, 1939, for the failure of the Shell Oil Company to do anything to commercialize this product subject to this contract.
- A. I would have to draw a conclusion; I don't recall.
- Q. Can you give me any general reason, or what the principal reasons were, if any, that you—
- A. The principal reason was we didn't have a material that we could market.
- Q. That was because you couldn't find any method of putting the asphalt emulsion with the so-dium silicate and keeping them in a [763] condition—
- A. Well, that was only incidental. We were not able to make uniformly successful cores out of sodium silicate and asphalt emulsion.
- Q. That was the only reason you gave to Mr. Ruddle?
 - A. Well, so far as I recall.
- Q. Did you ever tell him at any time that you were just on the verge of getting this thing on the market and everything was all set?
 - A. I think at one time I did.

- Q. Ever tell him from time to time that first you were about to go East to get the thing started, and then somebody else in the organization was going to do that?
- A. I never told him that I was about to go East. I told him that might possibly be the way it would be handled, owing to my familiarity with it. I couldn't determine whether or not I was going East.
- Q. Did you ever state to Mr. Ruddle that a man was about to be appointed to the job of putting this thing on the market and was going East to get it started, or words to that effect?
- A. Well, I, at one stage, when we were in an optimistic frame of mind, when we felt that we were going to be able to get the bugs out of this thing, we considered that possibility.
 - Q. About what time was that?
- A. I couldn't say. I would say it was, oh, after we had been working the thing for sometime.
- Q. Was it before or after the date of exercise of the option, which was, by the way, November 2nd, 1938?

 A. I don't recall.
 - Q. As shown by Exhibit C to the complaint.
 - A. I couldn't say.
 - Q. You couldn't place it as before or after that?
 - A. No.
 - Q. It might have been either one?
 - A. Yes, might have been.

- Q. Do you remember reporting at one of these many, many times you talked to Mr. Ruddle, at least one of these times, that your company had succeeded in putting the product into one package, [764] but that you were having a little problem still with the emulsion breaking down after the product had stood in the carton for several days?
 - A. I don't remember the particular report.
- Q. You remember you did make some such statement?
- A. No, I don't recall making the statement. I recall the fact that we did have favorable reports from the laboratory which were followed shortly after by unfavorable reports.
- Q. Can you give us any reason for there being such a change of heart in the laboratory on that?
- A. It wasn't a change of heart. It was a change of the stuff that as in the can.
- Q. Do you remember saying to Mr. Ruddle on one or two occasions that if you found you couldn't make the product so as to hold the emulsion in one package that you would go out and market it in two packages, just as it had been turned over to you in the first place?
- A. What are you referring to, sodium silicate, or Ruddle Solution?
 - Q. Let's start with Ruddle Solution.
- A. I don't recall making the statement, if you are asking me for a specific——

- Q. I am not asking you for any isolated conversation, but a statement that would cover these interviews.
- A. Well, I will have to give you a conclusion there based upon my——
 - Q. Recollection?
 - A. No. My reasoning at that time.
- Q. Well, I don't think that would be helpful to us.
- A. Any other attitude, if we were going to do anything with it, if anything could be done with it, it would have been stupid in even talking about it.
- Q. I don't know that I can quite construe that. Would you give me a little more——
 - A. No, unless you want to ask me.
- Q. Let's try it again. On many, many occasions isn't it true that you told Mr. Ruddle that if you couldn't get this thing [765] lined up in one package successfully your company would market it just as it had been turned over to them in the first place, that is, Ruddle Solution in one carton and asphalt emulsion in the other?
- A. Are you referring to the time when we determined that the Ruddle Solution had no value, or after?
- Q. Well, let's take that time before, if there was such a time.
- A. There was such a time. I don't recall any specific conversation, and I repeat that I must go back to a conclusion.

- Q. Well, it is your opinion now you probably did say some such thing?
 - A. It is quite possible.
- Q. What was the time that you fixed as the point where you determined that the Peck and Ruddle Solution was, as you put it, no good?
- A. I couldn't fix a definite time. There was a growing lack of enthusiasm which finally culminated in a determination on our part that we could not spend any more money; at least, that was my recommendation.
- Q. That conclusion which you say you reached that the product was of no value was based upon these technical reports that we have referred to from time to time?
- A. Well, as far as I was concerned probably upon verbal reports,——
 - Q. Financial reports—
 - A. Supporting them.
- Q. No doubt supported those in general. Do you remember saying to Mr. Ruddle or Mr. Peck, or both of them, that if you found you could not put this product into one package probably you would have to sell the solution separately, give the foundry a license to practice the teaching of the patent, and buy the asphalt wherever they might choose, maybe you could sell it, maybe somebody else would get the sale of the asphalt, but in that way you would have to put all of your profit on the solution?

- A. Well, that was discussed as a way out. [766]
- Q. At what point did that discussion take place, do you remember?
- A. Oh, I couldn't say that. I don't recall what part of the discussions that was in.
- Q. Well, was it late or early in these negotiations?

 A. Well, I would say it was late.
- Q. Along towards the end when the thing was about to be dropped, or attempted to be dropped?
- A. Well, I wouldn't say then. I don't remember whether it was—when we decided to drop it we dropped it.
- Q. When you let go there was no mistake about it. Do you remember about any conferences with Mr. Ruddle about the subject of core wash?
- A. We had some conferences. It was discussed at various times; prior to the signing of the contract it was discussed.
 - Q. Was it ever discussed afterward?
 - A. I don't recall the particular discussion.
- Q. What reports did you receive on the tests of the car wash presented to you by Peck and Ruddle from your own subordinates, or from your organization?
- A. I don't recall that we received any from our own people.
 - Q. Did Mr. Spiri report to you on it?
- A. I don't recall. I don't recall that he did. The only recollection that I have of a report on it was from Mr. Ruddle.

- Q. Did you ever make any intensive effort to find out whether that was a good or a poor product?
- A. I don't recall. We were primarily trying to develop the core oil, and whether the boys brought any core wash over, I don't know.
- Q. You don't know whether any tests were made on core wash over at the Vulcan foundry?
- A. Only from what was told to me by Ruddle. I recall his telling me that. Whether we had supple- [767] mental reports, or not, I don't recall.
- Q. Do you remember about a year and a half after you first started to investigate this Ruddle Solution that you told Mr. Ruddle that things didn't look too good for Core-Min-Oil, and you had been able to accomplish the same results by substituting sodium silicate for Ruddle Solution, and using it with asphalt emulsion?

 A. When was this?
 - Q. About a year and a half or so after. (Question read.)
- A. My recollection is that it was much less than a year and a half after this started, and it was a fairly recent discovery after we went into the thing.
- Q. Shortly after you went into the thing you found you could use straight sodium silicate instead of Ruddle Solution and get the same result?
- A. Yes. That is after, shortly after, it may have been a few months. I am quite sure it was less than a year and a half.

- Q. Was it before or after the date you exercised the option? A. I couldn't say.
- Q. Do you remember telling him you were able to use a different albino asphalt but had been told by your patent department they could not get patent protection on it and if they couldn't get patent protection they didn't think they would share any proceeds of such work with Ruddle?
 - A. I have no recollection of that, whatever.
- Q. You remember, of course, telling Mr. Ruddle late in the transaction that Shell was going to ask Ruddle to cancel the contract?
- A. I don't recall that I told him we were going to ask him to cancel the contract. My recollection is I told him that we were going to go no further with it. I don't recall that there [768] was any request for him to cancel the contract.
- Q. You merely told him you were going to drop your work under the contract and they could do as they pleased about it, is that it?
- A. Briefly, as I recall it, I told him that we were all through.
- Q. Do you remember telling Mr. Ruddle in the course of your work over there in the laboratory of your company you had developed a core oil that was superior to anything that Peck and Ruddle had brought in, and that that was going to be developed by your company as their own property?
 - A. That I told Ruddle that?
 - Q. Yes. A. I most certainly did not.

- Q. You are certain of that?
- A. I am quite sure.
- Q. Did you at any time in your conversation with Mr. Ruddle allude to the fact that your company had developed a different product to be used as a core oil?

 A. No.
- Q. From that which was brought in by Peck and Ruddle? A. No.
- Q. Have you any knowledge that your company did develop such a product?
 - A. Not so far as I know.
 - Q. You would not say they had not?
 - A. No.
 - Mr. Hackley: Let's take a recess for a moment. (After recess:)
 - Mr. Hackley: That is all.

Cross Examination

Mr. Aurich: Q. Mr. McSwain, are you an officer, director, or managing agent for either of the defendant corporations?

A. No, sir.

Mr. Aurich: That is all.

Mr. Hackley: Q. Mr. McSwain, do you wish to waive the reading and signing of this deposition? The Witness: Yes. [769]

State of California, City and County of San Francisco—ss.

I certify that, in pursuance of Notice of Taking Depositions hereunto annexed, on Tuesday, December 3, 1940, before me, W. W. Healey, a Notary Public in and for the City and County of San Francisco, State of California, at the offices of Messrs. Townsend & Hackley, in the Crocker Building, in the City and County of San Francisco, State of California, personally appeared John Floyd McSwain, a witness called on behalf of the Plaintiffs in the cause entitled in the caption hereof; and Roy C. Hackley, Esq., representing Messrs. Townsend & Hackley, appeared as Attorney for the Plaintiffs; and Alfred C. Aurich, Esq., representing Charles M. Fryer, Esq., appeared as Attorney on behalf of the Defendants; and the said witness, having been by me first duly sworn to testify the truth, the whole truth, and nothing but the truth in said cause, deposed and said as appears by his deposition hereto annexed.

I further certify that the deposition was then and there taken down in shorthand notes by Kenneth G. Gagan, and thereafter reduced to typewriting; and I further certify that the said witness waived the reading and signing of his said deposition, and that the Attorneys for the respective parties waived the reading and signing of same.

Introduced during the taking of said deposition, and referred to and specified therein, were Plaintiff's Exhibits 1, 2, 3, 4, which are returned herewith.

And I do further certify that I have retained the said deposition in my possession for the purpose of delivering the same with my own hands to the Clerk of the United States District Court for the Northern District of California, Southern Division, [770] the Court for which the same was taken.

And I do further certify that I am not of counsel, nor attorney for either of the parties in said deposition and caption named, nor in any way interested in the event of the cause named in the said caption.

In Witness Whereof, I have hereunto set my hand and affixed my official seal in my office aforesaid this 26th day of August, 1941.

[Seal] W. W. HEALEY,

Notary Public, in and for the City and County of San Francisco, State of California.

[Endorsed]: Filed Dec. 2, 1941. [771]

[Title of District Court and Cause.]

DEFENDANTS' EXHIBIT DDD

DEPOSITION OF ALLAN B. RUDDLE

(Deposition of Allan B. Ruddle taken pursuant to stipulation and pursuant to Federal Rules of Civil Procedure.)

ALLAN B. RUDDLE,

Called as a witness on behalf of Defendants, being first duly sworn, testified as follows:

Mr. Aurich: Q. Where do you reside, Mr. Ruddle?

- A. At 601 O'Farrell Street, San Francisco.
- Q. You are, of course, one of the plaintiffs in this action?

 A. Yes.
 - Q. Your age is what? A. Oh, I am 52.
 - Q. Where are you employed?
- A. I am employed with the United States Government, in the Internal Revenue Department.
 - Q. How long have you been so employed?
 - A. Since July 1st of 1940, I guess it was.
- Q. What was your occupation prior to that time? I mean by that, immediately prior to that time?

 A. Well, I work in a law office.
 - Q. Whose law office?
 - A. James F. Peck's law office.
- Q. Is that Mr. James F. Peck any relation to Lydell Peck, one of the plaintiffs in this case?
 - A. Yes; he is the father of Lydell Peck.
 - Q. How long did you work in that law office?
 - A. I was there about thirteen years, I think.

- Q. That would take us back to 1927.
- A. If I recall, it is about that time. [773]
- Q. What were your duties while employed in the office of James F. Peck?
 - A. I did research work for him.
 - Q. Research work of what character?
- A. Well, looking up cases and helping with different litigations that he had.
 - Q. Are you an attorney? A. No, I am not.
- Q. Prior to 1927 what was the nature of your employment?
 - A. We had a ranch in Merced County.
 - Q. Who is "we"?
 - A. My father, my brother, and myself.
 - Q. Were you occupied on that ranch?
 - A. Yes.
 - Q. For a number of years?
 - A. A number of years, yes.
 - Q. How many years would you say?
- A. Well, we owned the ranch 75 years and I spent a great deal of time on the ranch from the time I was born until I came down here.
- Q. In other words, after your education and after leaving school you worked on the ranch practically exclusively until 1927, when you were employed by Mr. Peck?
- A. Not exclusively. I was in the real estate business in Merced for, I think, about four years.
 - Q. Well, give me the approximate years of that.
 - A. Well, I would say from 1918 to 1922.

- Q. From 1922 to 1927 you were doing what?
- A. I was on the ranch.
- Q. Engaged in any other occupation?
- A. Well, during that time I sold real estate.
- Q. Anything else?
- A. Yes. I had a property leased that I developed into a dairy business.
 - Q. Anything else? A. No, I don't recall.
 - Q. Prior to 1918 what were you doing?
 - A. I think I was on the ranch prior to 1918.
 - Q. Engaged in no other occupation?
 - A. No, I think not at that time, no. [774]
 - Q. Were you in the Army?
 - A. No, I was not.
 - Q. What has been your schooling, Mr. Ruddle?
 - A. I went through Merced High School.
 - Q. When did you graduate?
- A. I did not graduate. I was out of Merced High School in 1907.
- Q. How many years of high school did you have?

 A. Four.
 - Q. Any college education? A. No.
- Q. Then from 1907 to 1918 you were on your ranch at Merced, California, and engaged in no other occupations other than those you have related?

 A. That's right.
- Q. Prior to your negotiations with the Shell Oil Company, which are the subject-matter of this suit, did you develop a core oil primarily designed for

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) use in foundry work for the manufacture of casting cores, which was known as Core-Min-Oil?

- A. That's right.
- Q. When did you develop that core oil?

Mr. Hackley: Just a moment. May I have the previous question and answer read?

(Record read.)

Mr. Hackley: Mr. Aurich, before the witness answers that question will you state whether or not there is a contention by the defendants, or either of them, that there was priority of development or inventorship of the subject-matter of this litigation?

Mr. Aurich: There is no such contention.

Mr. Hackley: Then I make no objection to his answering that question.

The Witness: A. I started on the development of it about sometime in 1936, probably the end of 1936. [775]

Mr. Aurich: Q. And completed it when?

- A. We had some negotiations with the Standard Oil Company just prior to our negotiations with the Shell Oil Company, and, as I remember, we started negotiations with the Shell Oil Company about the end of 1937.
 - Q. That does not quite answer my question.
 - Possibly November or December. Α.
- Possibly November or December. My question was, when did you complete the development of your core oil, which is known as Core-Min-Oil,

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
and which you say was started about the end of
1936?

- A. I say about the beginning of 1937, maybe the middle of 1937.
- Q. That would be approximately the month of June?

 A. Yes, I would say about there.
- Q. You mentioned something about negotiating with the Standard Oil Company. Was that in connection with this Core-Min-Oil? A. Yes.
 - Q. Whom did you negotiate with there?
 - A. The American Bitumals Company.
- Q. Is that a subsidiary of the Standard Oil Company? A. Yes, I understand it is.
 - Q. Who developed this Core-Min-Oil?
 - A. I did.
 - Q. You, alone? A. Yes.
- Q. What, if anything, did Lydell Peck have to do with the development of that product?
 - A. Nothing.
 - Q. Where was the development work started?
- A. I think it started in my apartment at 715 Leavenworth street, in San Francisco.
- Q. Do I understand your testimony correctly, Mr. Ruddle, that at no time from the start of your development work in the end of 1936 to the actual development of the Core-Min-Oil in June, 1937. [776] you were not assisted in your experimental work by anyone?

Mr. Hackley: As to Core-Min-Oil?

Mr. Aurich: As to Core-Min-Oil.

The Witness: A. No. I say "not assisted." I discussed it with them but the actual work of developing was done by myself.

- Q. Can you give me the names of some of the individuals with whom you discussed it?
- A. I discussed it with Lydell Peck, James F. Peck; I think that is all.
- Q. Will you give us as fully as you can the circumstances leading up to the development of your Core-Min-Oil?
 - A. I don't know what you mean by that.
- Q. What prompted you to develop your Core-Min-Oil?
- A. Well, I don't know that I could explain to you how I ever got the idea of core oil. It just came to me, I suppose.
- Q. How much money did you spend in the developing of your core oil?
- A. I couldn't answer that question, I never kept track.
 - Q. You have no record?
- A. Not as to costs, no. I know I worked a year on it before I took it to anybody.
- Q. Do I understand you spent approximately eight months on the development of your Core-Min-Oil?
- A. Yes; I would think possibly even longer that. Possibly a year; about a year, I would say, before I took it to anyone.
 - Q. When you took it to the American Bitumals

Company was your core oil completely developed?

- A. Well, I don't quite know just what you mean by being completely developed. We were able to make cores and castings successfully, but we never claimed that it was perfected to where it didn't need any work.
- Q. Was your core oil in June, 1937, in the state of development that you could have commercially manufactured and sold it for use in foundries?
 - A. Yes, I thought so. [777]
- Q. Just what was the composition of that Core-Min-Oil, Mr. Ruddle?

Mr. Hackley: As of June, 1937?

Mr. Aurich: As of June, 1937.

The Witness: A. It was a secret formula made up of sodium silicate, aluminum sulphate, and sodium fluosilicate, and asphalt.

- Q. Could you tell us now any of the circumstances which prompted you to use sodium silicate as one of the ingredients in a core oil?
- A. I can't recall at this moment, no, how ever I got started on it.
- Q. You can't tell us what prompted you to use aluminum sulphate as one of the ingredients of a core oil?

 A. No, I can't tell you.
- Q. Your same answer would be true as to sodium fluosilicate? A. That's right.
 - Q. Your same answer would be true of asphalt?
 - A. That's right.
 - Q. In June, 1937, will you give me the percent-

age of each of the ingredients you used in your core oil in grams and cubic centimeters?

- A. Well, I haven't that off-hand, but I probably could get you that.
- Q. Do you have notes covering the work that you did on your development?
- A. I wouldn't say I have all of the notes that I made, but I have some notes left.
- Q. Will you, at the next session of this deposition, produce all of the notes that you have concerning the development of your core oil, from the date when you first commenced its development until the date when you believed it was finally developed?

Mr. Hackley: There is no objection to that. We will have [778] those available whenever we re-set this deposition.

- Q. Can you tell me the function of sodium silicate in your core oil?
 - A. Yes. It was used as a binder.
 - Q. What do you mean by that?
- A. The art of core-making where they use sand, it is necessary to have something to act as a binder so this sand can be molded into certain shapes.
- Q. What was the function of the aluminum sulphate?
- A. Well, aluminum sulphate with the silica alone wouldn't work.
 - Q. What was the functions of the aluminum

sulphate together with the other ingredients that you used in your core oil?

- A. Well, in order to answer that, you have to take the fluoride and the aluminum together, that is, the sodiul fluosilicate and aluminum together and when properly mixed into sodium silicate it makes this binder.
- Q. What function did the aluminum sulphate have in the combination as that occurred?
- A. Well, it makes a lasting core. It is not hydroscopic, doesn't draw moisture, like the sodium silicate alone does.
- Q. What was the function of the sodium fluosilicate? [779]
- A. Well, it requires the three elements together to accomplish what I was looking toward; one alone will not do it.
- Q. Well, that is true, but what function did sodium fluosilicate have in the combination as a whole?
- A. I wouldn't be able to tell you the function that it had. I know that that combination worked.
- Q. What was the function of the asphalt in the combination as a whole?
- A. To make the core friable so that it would pour out, the sand would pour out after the casting had been made.
- Q. Do you think your notes will disclose the number of experiments that you made with your

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
core oil before you believed it was actually perfected?

- A. Oh, I am sure they don't. I know they show a great deal. When we entered into this contract with the Shell we thought that that was all there would be to it, so we destroyed a great many of the notes made up to that time.
- Q. Core-Min-Oil, prior to your negotiating with Shell, was an entirely new type of core oil?
 - A. Yes; as I understand, it was.
- Q. Prior to your negotiating with Shell there was nothing like it on the market?
 - A. Not that I knew of.
- Q. The marketing of this new core oil, which you say you developed, was a new enterprise or business, so far as you were concerned?

 A. It was.
- Q. You have made no attempt to refresh your recollection on the matters testified to by you so far from any documents, notes, memoranda, books or other sources?
- A. Well, yes; I looked at everything I had in my possession.
- Q. That was prior to testifying here this morning? A. Yes.
 - Q. What did you look at, Mr. Ruddle?
- A. I made notes that I had—notes that I had taken, I think those notes start after the Spotswood application had been put in: I made notes after [780] that.
 - Q. What sort of notes are they?

- A. They are written on yellow paper in my own handwriting.
 - Q. Have you those notes with you?
 - A. Yes.
 - Q. May I see them, please?

Mr. Aurich: Q. You have handed me a group of handwritten papers on yellow paper, the first one being dated Thursday, January 12, 1939; is that right? A. That's right.

- Q. Fastened to that is another paper dated January 13, 1939. A. That's right.
- Q. Another dated June 23, 1939, and which is dated on the last page June 24, 1939, bearing the signature, I presume, of Mr. J. [781] Lydell Peck.
 - A. That's right.
- Q. Another dated July 13, 1939, signed by you on July 14, 1939. A. That's right.
- Q. Another dated July 19, 1939; another dated August 11, 1939. A. That's right.
- Q. Another dated August 14, 1939, and the last dated August 31, 1939. A. That's right

Mr. Aurich: I will now mark for identification as Defendants' Exhibit A notes produced by the witness being dated on the first sheet Thursday, January 12, 1939, consisting of three pages, signed on the third page "A. B. Ruddle, January 13, 1939."

(The notes referred to were marked "Defendants' Exhibit A for Identification.")

Mr. Aurich: As Defendants' Exhibit B for Identification I will ask you to have the document dated January 13, 1939, signed by A. B. Ruddle, consisting of one page, marked for identification.

(The document referred to was marked "Defendants' Exhibit B for Identification.")

Mr. Aurich: I will next ask to have marked for Identification as Defendants' Exhibit C the ten pages of notes dated on the first page June 23, 1939, dated on the last page June 24, 1939, and containing the signature of J. Lydell Peck, apparently placed thereon on June 24, 1939, on the last page.

(The notes referred to were marked "Defendants' Exhibit [782] C for Identification.")

Mr. Aurich: I will now mark for identification as Defendants' Exhibit D two sheets dated on the first page July 13, 1939, bearing the signature of "A. B. Ruddle, July 14, 1939," on the second page.

(The notes referred to were marked "Defendants' Exhibit D for Identification.")

Mr. Aurich: I will now mark for identification as Defendants' Exhibit E the seven pages of handwritten notes dated on the first page July 19, 1939.

(The notes referred to were marked "Defendants' Exhibit E for Identification.")

Mr. Aurich: I will now mark for identification as Defendants' Exhibit F the two pages of notes dated on the first page August 11, 1939.

(The two pages of notes referred to were marked "Defendants' Exhibit F for Identification.")

Mr. Aurich: I will now mark for identification as Defendants' Exhibit G the one page of notes dated August 14, 1939.

(The notes referred to were marked "Defendants' Exhibit G for Identification.")

Mr. Aurich: I will now mark for identification as Defendants' Exhibit H the three pages of notes dated August 31, 1939, and signed on the last page "A. B. Ruddle."

(The three pages of notes referred to were marked "Defendants' Exhibit H for Identification.")

Mr. Aurich: Q. I understand that the typewritten documents which were attached to Exhibits A to H inclusive for identification were typewritten copies of the notes contained in the Exhibits A to H, inclusive? A. That's right. [783]

- Q. They were made up for your convenience and for purposes of facilitating the reading thereof?
 - A. That's right.
 - Q. Were those copies made by you?
- A. Well, they were made by the girl in Mr. Peck's office.
- Q. I mean they were made under your direction, at least? A. Yes.

- Q. Before testifying here today did you make any attempt to refresh your recollection from any other documents, notes, memoranda or books other than those which you have so far produced?
- A. No, I don't recall any other letters and things that I think probably are in evidence already. I have read those.
- Q. Have you read any of the depositions that have been taken of any of the witnesses who were called by your counsel, Mr. Hackley?
- A. I think I read Mr. McSwain's. That is the only one that I have read.
- Mr. Hackley: Would you fix the time at which he read that in your question?
- Mr. Aurich: Q. When did you read the deposition of Mr. McSwain?
- A. Well, I was present when it was taken, and I think I read it just as soon as it came back. I haven't read it since.
- Q. You have made no attempt to read that deposition and to refresh your recollection for the purpose of testifying here today?
 - A. No, I have not.
- Q. If I understand your testimony correctly, the only documents that you have used to refresh your recollection for the purpose of testifying here today, other than Exhibits A to H, are some letters that passed between you and Mr. Peck, on the one hand, and the Shell Company on the other?

 A. Yes.
 - Q. Do you have any notes on work done, money

spent, time expended, and the composition of your Core-Min-Oil, other than those which you have produced here?

A. Yes, there are some; I don't know [784] just what they are; I haven't looked for them.

Mr. Hackley: I assume those are in your earlier testimony.

Mr. Aurich: I was going to say exclusive of those that we have already talked about.

The Witness: No, I don't know of any other than what you asked for a while ago.

- Q. And you are going to produce those at the next session? A. Yes.
- Q. In other words, you have no contemporaneously dated memoranda or notes of your association or contact with the Shell Oil Company earlier than January 12, 1939?
- A. No, I don't think—there might be some, but I haven't looked for anything; but I don't think there is anything else.
- Q. Prior to your negotiating with Shell I understand you had some negotiations with the American Bitumals Company. A. Yes, we did.
- Q. Did you attempt to interest them in the manufacture and sale of your core oil?
 - A. Yes. They did become interested.
 - Q. When was that, Mr. Ruddle?
- A. Just prior to our negotiations with the Shell Oil Company.
 - Q. Did you attempt to use your Core-Min-Oil in

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
practical operations at any place prior to negotiating with the Shell?

- A. We had it at the Macauley Foundry for about six months.
 - Q. Any other—
 - A. You mean prior to talking to Shell about it?
 - Q. Prior to negotiating with Shell.
- A. Well, that is the principal one we had. We had it at the Kingwell Foundry, too, but that was only—they were so small.
 - Q. That is K-i-n-g-w-e-l-l?
 - A. K-i-n-g-w-e-l-l, over here on Natoma street.
 - Q. In San Francisco? A. Yes.
- Q. When did you commence to use your Core-Min-Oil in practical [785] operations at the Macauley Foundry?
- A. I think about eight months, or something like that, prior to taking it to the Shell Company, I spent in the Macauley Foundry.
 - Q. Was that eight months continuously?
- A. Well, I was there practically every day several days a week; maybe some weeks I wouldn't be there, but it was necessary to learn the operation of the core business in order to develop this.
- Q. In other words, you were endeavoring to get some experience in the art of core making from the Macauley Foundry to assist you in the further development of your core oil? A. That's right.
- Q. Do you recall approximately when you first commenced negotiating with Shell?

- A. Well, it was in the latter part of 1937; I think either November or December.
- Q. It was eight months prior to that time, approximately, when you commenced to place your core oil in practical operation at the Macauley Foundry?
 - A. Yes, that would be about right.
- Q. When you went to the Macauley Foundry did you have your core oil in such a shape that you could use it in the making of cores? A. No.
- Q. What I am interested in at the present time is how much time you spent at the Macauley Foundry actually using your core oil in practical operations at that place.
- A. Oh, I should guess it was two or three months, I think, possibly, that we had it where we thought it was ready to market.
- Q. In other words, your experiments on your Core-Min-Oil at the Macauley Foundry were approximately two or three months prior to the commencing of your negotiations with Shell?
 - A. No, I didn't say that.
 - Q. What is the fact?
- A. I said that possibly two or three months [786] before I went to the Standard Oil Company first we had it ready for market.
- Q. Let's forget the Standard Oil Company for a moment and concentrate on the commencement of your negotiations with Shell. For the purpose

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
of this question we can assume that your negotiations with Shell commenced about December of 1937.

A. Yes, I think that's about right.

- Q. How long prior to that had you used your Core-Min-Oil in practical operation at the Macauley Foundry?
 - A. About three months prior to that.
 - Q. That would be about September.
 - A. Somewhere in there, yes, I would guess.
 - Q. That is at Oakland, California?
 - A. Yes. That is in Berkeley.
- Q. Did you use your Core-Min-Oil in practical operations at that place continuously during the two or three months prior to negotiations with Shell?
- A. Yes, I would say we had it so it was marketable.
- Q. But did you use your Core-Min-Oil in practical operations continuously there or was it a spasmodic operation? Were you there every day, for example?
- A. No, I wouldn't say I was there every day, but I was there several times a week.
- Q. What materials would you use during those operations?
- A. The materials that I described to you a while ago.
- Q. That is, the materials which you say you developed and which constituted your Core-Min-Oil?
 - A. That's right.

- Q. What percentage of those various elements would you use in making up your core oil?
- A. Well, I couldn't give that to you by memory, but I can get it for you.
 - Q. Will you get me that information, please?
 - A. Yes.
 - Q. Do you have that in the form of notes?
 - A. I am sure that I [787] can find notes on that.
- Q. Will you produce those notes at the next session of this deposition, please? A. I will.

Mr. Hackley: May I ask the witness, are those formulae not the same notes we referred to earlier?

A. Yes.

Mr. Aurich: Q. You understand, I am speaking now of two different periods of time. The first request covered the period of time up to the point where you said you had your core oil developed. I am now asking for the notes covering the nature of your work at the Macauley Foundry.

- A. Yes. I think I understand what you mean.
- Q. Can you tell me the type of asphalt that was used at the Macauley Foundry during the period of time you were there?
- A. No, I couldn't tell you other than it was an asphalt emulsion that the American Bitumals Company gave me.
 - Q. How did you mix your core oils?
- A. Well, they were mixed by hand, or we mixed it in their machine. They have a machine that mixes core oil.

- Q. You used both forms of mixing; in other words, one form would be by hand and the other in a machine?
 - A. Yes, we tried it in a machine.
- Q. That is, the core oil, itself. I am not speaking of mixing the core oil by hand. I am speaking of how you put together the various components which you say are contained in Core-Min-Oil.
- A. Well, this solution that I made was made at home. I generally made that in my apartment, and that was taken to the foundry together with asphalt emulsion in two separate containers. Is that what you mean?
- Q. That is what I had in mind. In other words, you had one container containing sodium silicate, aluminum sulphate, and sodium [788] fluosilicate?
 - A. Yes.
- You had another container with your asphalt emulsion in it. A. That's right.
- Q. You would take both containers to Macaulev's Foundry. A. That's right.
 - Q. Then you would mix it at that place.
 - A. That's right.
 - Q. How would you mix it there?
- I would put in the solution first, mix with the sand, and then add the asphalt emulsion.
- Q. You would take the container having the solution—I suppose we can call that the Ruddle solution? A. Yes.
 - Q. Is that what it has been designated?

- A. Yes, we always called it that.
- Q. You understand when I speak of Ruddle solution I am speaking of a solution containing sodium silicate, aluminum sulphate, and sodium fluosilicate.

 A. Yes.
- Q. You would take the Ruddle solution and mix it with the sand?

 A. That's right.
- Q. After it was thoroughly mixed what would you do then?
 - A. Then you would add the asphalt emulsion.
- Q. How long after that mixing would you commence the making of cores? A. Immediately.
- Q. Can you give me the names of the persons who were present during these times?
- A. Well, the man at the Macauley Foundry who was assigned to help me, his name was Otto Gosch, I believe; he was the head coremaker there.
- Q. How did you happen to go to the Macauley Foundry?
- A. I think the Kingwell Foundry people out here told me that the Macauley Foundry was the largest foundry around the Bay, and that Mr. Olson, of the Macauley Foundry, was a teacher at the University of California on core oils, and he was the best informed man on [789] the practice around the Bay.
 - Q. Practice of what?
 - A. Of foundry practice.
- Q. Have you any idea of the number of cores that you made while you were at Macauley's?

- A. Well, that would be hard to estimate.
- Q. Would your notes show that?
- A. Possibly. I just don't know whether it would or not, all of it, but I think many, many of them.
- Q. Would your notes also show the condition the cores were in?

 A. I think so.
- Q. Would your notes also disclose how long the cores remained in that condition?
 - A. I think I have notes on that.
- Q. Would your notes also show the ratio of sand to oil that was used by you? By "oil" I mean your Ruddle solution and the asphalt emulsion.
 - A. Yes. I am sure they will.
- Q. Would your notes also show the number of satisfactory cores that were made without any failures?
 - A. I am not sure that they would do that.
- Q. Have you any idea as to the number of satisfactory cores that were made without any failures?
- Mr. Hackley: Do you mean the percentage of cores?
 - Mr. Aurich: The number.
 - Mr. Hackley: You mean the total number?
 - Mr. Aurich: The total number of cores made.
- Mr. Hackley: I don't get the ratio of your question.
- Mr. Aurich: Well, if the witness doesn't understand it I will be glad to reframe it.

The Witness: Yes; I don't entirely understand it.

- Mr. Aurich: Q. You would make, let us say, ten cores. A. Yes.
- Q. In those ten cores would you have any failures?
- A. Well, it [790] depends upon the proportions that we use. While I was there I tried to determine the correct proportions to be used, tried to determine the limit.
- Q. Would your notes show the various percentages and proportions that you used?
 - A. I think probably they will.
- Q. Would your notes show the number of castings that you made?
 - A. Well, that is possible; I don't know that.
- Q. Well, I think we can dispense with that until such time as we see your notes, Mr. Ruddle. Can you tell me what difficulty, if any, you encountered with Core-Min-Oil in the making of cores and castings prior to your negotiations with Shell?
- A. Well, after I determined what I determined was the best ratio to be used I had trouble with the cores getting soft at times. Now, that was not so bad at the Macauley Foundry as it was at the Vulcan Foundry.
- Q. I am speaking now, Mr. Ruddle, of prior to your negotiating with Shell. Did you do work at Vulcan Foundry prior—
 - A. No, no; just at Macauley.

- Q. You would mix one and you encountered the softening of a core? A. Yes.
 - Q. What else?
- A. As I recall, now, making cores at the Macauley Foundry, I did most of my baking during the noon hour, when the fires were out, and I didn't have any difficulty at that time, but when they would come back from lunch and turn on the fires we would have difficulty, they would soften.
- Q. Any other difficulty that you encountered other than the softening of the core?
 - A. Well, it dried badly on the bench.
 - Q. What would dry badly?
- A. This core material dried badly on the bench. That was overcome by keeping it in enclosed containers. If it was left exposed to the air it would have a [791] crust come on it, after it had been exposed for an hour or two.
- Q. That is, the finished sand after it had been mixed with Ruddle solution and asphalt emulsion had a tendency to dry badly on the bench before they could make the core?
- A. If it was left out, yes; we fixed it so we could put it in closed containers, or even by putting wet sacks over it.
 - Q. Any other difficulty?
 - A. Not that I recall.
- Q. What form of ovens did they have at the Macauley Foundry?

A. They had an open fire oven, open gas oven where the fire came in contact with the core.

Q. What did you do to overcome the difficulty you had with the cores getting soft?

A. When we took it to Shell we hadn't overcome that difficulty.

Q. The only other difficulty that you can now recall is that it dried badly on the bench, that is, the sand did, and you overcame that by keeping it in closed containers or under wet sacks?

A. That is correct.

Q. Can you tell me when you encountered the difficulty of this, shall I say, fast-drying?

A. On the benches, you are talking about?

Q. Yes.

A. Well, I think that was always present, all the time that I worked with it.

Mr. Aurich: Q. In other words, to clear the matter up, right from the very beginning you encountered the difficulty of what [792] you termed drying badly on the bench. A. Yes.

Q. When did you ascertain that you could overcome that difficulty by keeping the sand in closed containers or under wet sacks?

A. Well, that was at the Macauley Foundry toward the latter part of my work there.

Q. That was toward the end of your work at Macauley's?

A. Yes.

Q. Prior to your negotiating with Shell had any Core-Min-Oil been sold by either you or Mr.

Peck, or anyone acting under your authorization?

- A. No
- Q. Had the merits and stability of Core-Min-Oil been fully demonstrated and proved before your negotiations with Shell? A. Yes.
- Q. In other words, you had also overcome the difficulty of the softening of the cores?
 - A. I did not say that.
- Q. You think that despite the fact you had trouble with the softening of the cores the merits and stability of your core oil had been fully demonstrated and proved? A. Yes.
- Q. What did your business of making and selling Core-Min-Oil consist of prior to your negotiations with Shell?
 - A. Well, we hadn't sold any of it.
- Q. In other words, you had no business of making and selling Core-Min-Oil?
 - A. No. We had just developed it.
- Q. What good will in the business of making and selling Core-Min-Oil did you or Mr. Peck have prior to the signing of the contract with Shell?

Mr. Hackley: I object to the question as calling for a conclusion of the witness.

The Witness: Well, I wouldn't know how to answer that question.

Mr. Aurich: Q. Do you understand what is meant by the term "good will"?

A. Yes. That is a business that is built up, as [793] I understand.

- Q. In other words, it is the result of a growing business.
 - A. That is what I understand the term to mean.
- Q. If you have no business built up you would assume that there is no good will?
- A. Well, I would say we had no business built up.
- Q. Had any market price for Core-Min-Oil been established prior to your negotiating with Shell?
 - A. No.
- Q. Do you know an individual by the name of Dr. Cleveland? A. I do, yes.
 - Q. Will you give me his full name?
- A. I can't give you the full name. We always called him Dr. Cleveland, and he worked for the Philadelphia Quartz Company, in Berkeley. That is all I could tell you about his name.
- Q. What is the business of the Philadelphia Quartz Company?
 - A. Manufacture of sodium silicate.
- Q. Did you ever have any conversation with Dr. Cleveland regarding the use of sodium silicate emulsion?

 A. Yes.
 - Q. When.
- A. Yes, I talked to Dr. Cleveland about sodium silicate and asphalt emulsion, if that is your question.
- Q. When did you have your first conversation with him in regard that subject?

- A. I would say when I was at the Macauley Foundry.
- Q. Was that at the time you were endeavoring to ascertain what the art of core-making was?
- A. No. It was along, I think, toward the end of my work there, probably within the last, oh, four or five months before the end of my work that I discussed it with Dr. Cleveland.
- Q. Did you have more than one discussion with him?

 A. I think I probably 'had several.

 [794]
 - Q. What was the purpose of those discussions?
 - A. Well, I was having trouble with friability.
 - Q. Yes.
- A. And I tried many things, and Dr. Cleveland suggested that I try asphalt emulsion.
- Q. Can you give me the date of any of your conversations with Dr. Cleveland?
- A. Not any more than what I have just told you.
- Q. Can you name any persons who were present at any of those conversations with Dr. Cleveland, other than yourself and the doctor?
 - A. Not that I recall.
 - Q. Where did those conversations take place?
- A. Over at the Philadelphia Quartz Company, in Berkeley.
- Q. You had not considered using asphalt emulsion as an element of your core oil prior to your discussion with Dr. Cleveland?

- A. No, I hadn't. I believe I did use asphalt, but not in emulsion form, prior to that.
- Q. Did you use that in any commercial operation?

 A. No; just experimentally.
- Q. Going back to these experiments at your home, Mr. Ruddle, when you made this Ruddle solution did you have in mind the use of that for core-making purposes?
 - A. Well, I worked on many other things.
 - Q. What do you mean by that?
- A. Well, I would have to see my records to show you; I couldn't recall just what it was that I did there, but I did try a mineral oil. That is one thing [795] I worked on.
- Q. Did you have in mind specifically a core oil, for example, when you put together for the first time the various chemicals constituting your Ruddle solution?

 A. No, I would say not.
- Q. When did the idea come to you of using your Ruddle solution in a core oil?
- A. Well, I tried to think of that a while ago when you asked me that question. I don't recall just exactly what gave me the idea to start on it.
- Q. Can you tell me now the very first time that you ever made any cores with your Ruddle solution, either with the asphalt emulsion, with asphalt, or without either asphalt emulsion or asphalt?
- A. The first time I tried it was at the Santa Fe Foundry in Richmond.
 - Q. When was that?

- A. Well, that was at the beginning of my experimental work on core oils.
- Q. That would be sometime in the letter part of 1936?
- A. I would say somewhere near there. That was the first thing I did.
- Q. What did you use in making cores at that time?
- A. Well, I think, if I could recall, I used a mineral oil, a red oil, also a pale oil, and asphalt. I couldn't tell you the name or the grade of asphalt. It was there at the plant at Richmond.
 - Q. What kind of mineral oil did you use?
- A. I think the Standard Oil Company called it red oil.
- Q. That was a trade name. The Standard Oil Company sold this product to you?
- A. I think they called it red oil, and there was another one called pale oil. What kind of oil they are, I don't know. They told me they were inexpensive oils that they didn't market.
- Q. Both of them were mineral oil, as you understand it? A. Yes. [796] That was what they told me.
- Q. The Standard Oil Company that you are referring to is the Standard Oil of California?
 - A. Yes, out at Richmond.
- Q. That core oil that you made up at that time, however, didn't contain any Ruddle solution, did it? A. Yes.

- Q. It contained Ruddle solution? A. Yes.
- Q. Mineral oil? A. That's right.
- Q. And asphalt?
- A. No. I had several different samples made up of various things.
- Q. I am trying to find out the very first time that you made a core consisting of the Ruddle solution and asphalt, and whatever else you may have added to it.
 - A. No. That was the first time I used asphalt.
 - Q. And Ruddle solution?
 - A. That's right.
- Q. At that time you also experimented with other oil, such as mineral oil? A. Yes.
- Q. In other words, you made a series of cores, or a core, with Ruddle solution and asphalt?
 - A. Yes.
- Q. And other series of cores, or a core, with this mineral oil and asphalt?
 - A. Yes, that's right.
 - Q. What was the result of those experiments?
 - A. Well, they were all failures.
 - Q. Have you any notes of those experiments?
- A. I will have to look; I won't be sure that I have.
- Q. Will you look for them, please, and if you have them bring them with you at the next session?
 - A. Yes.

Mr. Hackley: I will reserve an objection as to the materiality until I see the notes. Lydell Peck and Allan B. Ruddle

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.)

Mr. Aurich: Q. In paragraph III of your complaint herein, commencing on page 2, lines 20 and 21, it is alleged that the [797] matter in controversy exceeds, exclusive of interest and costs, the sum or value of \$3000. This complaint is one which was verified by you, as well as by Mr. Peck. Will you please state all of the factors upon which that allegation is predicated? I have only read a portion of paragraph III. You are, of course, at liberty to read the entire paragraph.

The Witness: Maybe I don't quite understand what the thing is about.

Mr. Aurich: Q. Let me ask it this way: How did you arrive at a conclusion that the subjectmatter of this present controversy exceeds \$3000? You know the document you are looking at, don't you, Mr. Ruddle?

- A. Yes, this is the complaint.
- Q. That was verified by you, wasn't it?
- A. Yes. I don't know whether I can answer the question or not, now, without looking over-don't we allege-

Mr. Aurich: Well, don't ask Mr. Hackley, Mr. Ruddle, at this time. You embarrass him as well as me.

- Q. You are unable to state at this time how you arrived at the conclusion that the subjectmatter of this suit exceeded \$3000 exclusive of interest and costs?
 - A. Well, I don't know what you mean by "ar-

rived at". I consider that the thing involves many thousands of dollars.

- Q. Well, that is what I am driving at. What are the things that you considered in arriving at that conclusion?
- A. Well, it was a contract entered into to sell the product and we considered that the sale of this product—the lack of sale of the [798] product meant something. That is the basis of this suit. I don't know whether that answers your question or not.
- Q. Not quite. Can you name one factor, or one idea in your mind, which led you to the conclusion that the failure of Shell, shall we say, to sell your Core-Min-Oil damaged you in the extent of over \$3000 exclusive of costs and interest?
- A. Well, we determined there was a market for this; we determined the size of the market.
 - Q. Anything else?
- A. And we had a right to expect that a big portion of that market would be realized.
- Q. By the latter part of your answer you mean that you expected that your core oil would supersede the core oils on the market?

 A. Yes.
 - Q. In a large portion of the market?
 - A. That's right.
 - Q. Who determined the market?
- A. Well, it was determined by us in the best way we had of finding out about it. It was also

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
discussed at the time with the Shell Oil Company.

- Q. Who is "us," Mr. Ruddle?
- A. Well, Lydell Peck, James F. Peck, and myself.
 - Q. What did you determine the market to be?
- A. The market was 23,000,000 gallons of linseed oil sold annually. Now, that would be about one-third of the amount that would be sold if this supplanted that market.
- Q. I don't understand the latter part of your answer Mr. Ruddle. Do you mean——
 - A. We could sell three times as much.
- Q. In other words, you think you would sell 69,000,000 gallons of core oil?
- A. If we took the entire market of linseed oil. That doesn't take in all oil.
- Q. What percentage of the market did you contemplate you would take? A. 50 per cent. [799]
 - Q. When did you arrive at that figure?
- A. Well, in discussing the sale with the Shell Oil Company.
 - Q. Any other way?
- A. Well, this had a drying time that dried within—saved about two-thirds of the time of drying. That, in itself, would be enough to take the market if it was put on the market.
 - Q. Anything else?
- A. The saving in cost was another thing that we determined was most valuable, which it is.

Q. Anything else?

A. Yes. The cores were free from bubbles and blisters, they call it, I believe "air blow"; that cuts down the lathe work.

Q. Anything else?

A. And the cost of this, for another thing, would be a great deal less than anything on the market.

Q. When you say "this," you mean your core oil?

A. Yes, I mean the Ruddle solution and asphalt emulsion.

Q. What was the cost of the Ruddle solution?

A. About 5 cents a gallon, I think; 3 to 5 cents a gallon, and I think asphalt emulsion runs about 5 cents a gallon.

Q. Are there any other factors that you arrived at in determining that you would take 50 per cent. of the market with your Core-Min-Oil?

A. Well, I am not trying to limit it to 50.

Q. Well, I am taking your testimony.

A. That is what we talked of, anyway, at that time.

Q. In arriving at a determination you say that that was determined by Shell because there was two-thirds of the saving in drying time—

A. A saving in cores.

Q. That the cores were free from bubbles, and the cost of the Ruddle solution and asphalt?

A. That's right.

- Q. What else enabled you to arrive at the determination of——
- A. I don't recall right now just what other things there were, if [800] there were any others, but that is enough.
 - Q. What do you mean by "saving in cores"?
- A The foundries that we worked with, the Macauley Foundry and the Vulcan Foundry, they at one time told us they lost as much as 25 per cent. of their cores, their castings, I mean, because of gases that form in the linseed oil. They have to in vents in their cores to let the bases out. Those gases cause little blow-holes to be in the castings, and when they get those they are thrown out and melted and re-cast, and that percentage runs as high, they told us at that time, as 25 per cent.
- Q. Did you appreciate all of these things prior to your negotiating with Shell, and by "things" I mean the factors that you said enabled you to arrive at a determination that 50 per cent. of the market would be taken in by your core oil?
 - A. Yes.
- Q. How did you arrive at the figure of 3 to 5 cents per gallon as the cost of manufacturing in commercial quantities, I am speaking of now, your Core-Min-Oil?
- A. That is the Ruddle solution, you are talking about now, isn't it?
 - Q. Yes, that's right.
 - Mr. Hackley: Yes. I think we segregated it.

Mr. Aurich: Yes.

- Q. How did you arrive at the price of 3 to 5 cents per gallon for the cost of manufacturing in commercial quantities Ruddle solution?
- A. Well, I got a price from the Philadelphia Quartz Company on sodium silicate, and the other chemical companies that sell the other products.
- Q. Did you get that price in writing, or was it verbal?
- A. I think correspondence; I think I have correspondence on it.
- Q. Will you produce that correspondence, please? A. Yes.

(At this point the further taking of this deposition was [801] continued until a day to be set upon agreement of respective counsel.)

[802]

Mr. Aurich: In one of the previous depositions, Mr. Hackley, at which time you were taking the depositions of some of the defendants' employees, you requested the production of various books and reports. I do not have in mind at the moment those that you particularly requested. I do know, however, that at that time a very diligent search was made to comply with your request, and we produced numerous books and reports, etcetera. However, quite recently additional books and reports have been uncovered and I have them before me. They

consist of, first, a book kept by a man by the name of Everson, a book kept by a man by the name of Grant E. Warren, and two folders of reports of Mr. W. H. Spiri. The reports by Mr. Spiri, I believe, relate solely and only to the work on core oil. The books of Everson and Warren relate to matters other than core oil, but do include some work on core oils. We have gone through the books and marked the places in which you will find references to core oils. However, you are at perfect liberty to inspect the entire book, and we will be glad to let you have copies of the pertinent pages of any you want, and also to let you have a copy of Mr. Spiri's reports, of course, at our expense, and you can examine them at any time that is convenient to you.

Mr. Hackley: Thank you, Mr. Aurich. I believe, if I remember our record correctly, I asked for any note books of Grant Warren, that name is familiar to me. I don't recall the name Everson coming into it, but I want to go over them if they are related to core oils. My request, you will remember, [803] was for anything at all of a documentary nature relating to core oils. I understand that you then produced all you could locate?

Mr. Aurich: That's right, and it is in compliance with that request, in utter disregard of whether you asked for Mr. Everson or not, having found Mr. Everson's book I want to let you know it is here for your inspection.

Mr. Hackley: I will appreciate that. I will go over these promptly. It may be, incidentally, that we will have to call Mr. Everson and Mr. Grant, either at the time of trial or by way of deposition. We can determine that after I have examined those books.

Mr. Aurich: Q. Mr. Ruddle, at the time of the taking of your deposition last May you were requested to produce certain documents, notes, memoranda, and books. Have you those with you?

A. Yes, sir, they are over there, I think in that—that is all I could find.

Mr. Hackley: Those are the note books, Mr. Aurich, which were produced by Mr. Ruddle, handed to me, and I in turn delivered to you for your inspection, and of which I believe you have made copies of any or all parts that you considered pertinent to your position?

Mr. Aurich: That is right.

The Witness: I know I had other books, but I am unable to locate them, and it is just possible I gave some to the Shell Oil Company at the time they were investigating this.

Mr. Hackley: May I interject a question, Mr. Aurich, to [804] this effect: Have you produced all the notes and note books relating to the development of core oil which you were able to find in your files, Mr. Ruddle?

Th Witness: Yes, that is all I could find. I have gone through, I think, everything.

Mr. Hackley: Have you looked in every likely place where you would expect to find such matters?

A. Yes.

Mr. Hackley: You do believe there are others?

A. Yes, in the possession of Shell Oil Company; I had many others, but I am not able to locate them.

Mr. Hackley: Do you specifically recall leaving any note books with the Shell Oil Company during your work with it?

A. It may have been we did. We turned over everything we had that was useful, that we thought was useful, to show them what we had done.

Mr. Hackley: Have you any knowledge of any records or notes prepared by this witness which are in the possession of Shell Oil Company, Mr. Aurich?

Mr. Aurich: Not only do I not have any knowledge of any such records, but I am quite confident there are none.

Mr. Hackley: You might check on that, although I would assume it would have been developed in your original search.

Mr. Aurich: I certainly would, because if there are any I would be as anxious as you are to produce them.

Q. You were asked at the previous taking of your deposition to produce some correspondence that passed between you and Philadelphia Quartz Company regarding the price of sodium silicate. Were you able to find that letter?

A. No, I couldn't find it. I know we had the letter, and had one from the Emeryville Chemical Company. [805]

Mr. Hackley: You may have given that to the Shell Oil Company?

The Witness: Yes, they may have it, because that was pertinent to the investigation.

Mr. Aurich: I think perhaps you had better identify these books for me and the various documents one by one, if you will, please, and as you do so I will ask to have them marked for identification, with an appropriate letter, so we can discuss them intelligently later on.

The Witness: I don't know whether you want that identified. It was an experiment that we ran at 715 Leavenworth street.

Mr. Aurich: You refer to "this," the first group consisting of some notes on note paper, eight pages.

A. Eight pages.

Mr. Aurich: We will mark that Defendants' Exhibit I for Identification.

(The notes were marked "Defendants' Exhibit I For Identification.")

Mr. Aurich: For the purpose of the record, the date appearing on the first of the group of eight pages is 9/23/37.

The Witness: And here is one, 10/2; that is eleven pages.

Mr. Aurich: The group of note papers consisting of ten pages pinned together and the first page

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
of which is dated 10/2/37 is marked For Indentification as Defendants' Exhibit J.

(The notes were marked "Defendants' Exhibit J For Identification.") [806]

Mr. Aurich: I will next have marked a group of seven pages of similar notes, on similar note paper, the date on the first page being 10/9/37, and I will ask to have that group of papers marked Defendants' Exhibit K For Identification.

(The notes were marked "Defendants' Exhibit K For Identification.")

Mr. Aurich: You have next handed me some notes on three sheets of yellow legal size paper, the date appearing on the first sheet being August 10, 1937, and I will mark those three sheets Defendants' Exhibit L For Identification.

(The Notes were marked "Defendants' Exhibit L For Identification.")

Mr. Aurich: You have next handed me one piece of paper on the back of a letterhead of "Lydell Pack for State Board of Equalization, Second District," on the opposite side of which appears a date 11/1/37, containing some notes. I will ask that that be marked Defendants' Exhibit M For Identification.

(The document was marked "Defendants' Exhibit M For Identification.")

Mr. Aurich: You have next handed me a note book entitled "Year Book 1930"; I will ask that the book be marked Defendants' Exhibit N For Identification.

(The book was marked "Defendants' Exhibit N For Identification.")

Mr. Aurich: Q. In connection with that last offer, Mr. Ruddle, let me ask you, are all the notes in that book pertaining to your work on core oils, or——

- A. No, no.
- Q. (Continuing): ——are other matters contained?
- A. Other matters. I did some work for Mr. Watson at one time. I went out to his place. I didn't put that in—when you asked me where [807] I had worked I forgot to include that in the first part of the deposition. When I read it I wrote in the front of a notation to call your attention to it.

Mr. Aurich: You mean you wrote in the copy of your deposition that Mr. Hackley has?

- A. Yes; after I wrote it I read that in there.
- Q. Are all the notes in Defendants' Exhibit N For Identification pertinent to core oils in your own handwriting?
- A. Well, I wouldn't say that without examining it.
- Q. How about Defendants' Exhibit L For Identification? A. That is mine.

- Q. Are those all in your handwriting?
- A. They are all in my handwriting.
- Q. Defendants' Exhibit M For Identification is your own handwriting? A. Yes.
- Q. How about the remaining exhibits, Defendants' Exhibits——
 - A. They are all in my handwriting.
 - Q. (Continuing): —I, J, and K?
 - A. They are all in my handwriting.

Mr. Aurich: I will now ask to have another note book produced by the witness, having the name "Allan B. Ruddle" printed in ink thereon, marked "Defendants' Exhibit O For Identification."

Mr. Hackley: Does that have any date on it, or anything we can use for identification?

Mr. Aurich: No. I can identify the other easily.

(The book was marked "Defendants" Exhibit O For Identification.")

Mr. Aurich: I will next ask to have marked Defendants' Exhibit P For Identification an additional note book produced by the witness with the signature "A. B. Ruddle" appearing at the [808] top, and I will ask you, Mr. Ruddle, if that is your signature?

A. That is it.

(The book was marked "Defendants' Exhibit P For Identification.")

Mr. Aurich: Q. Do all the notes in Defendants' Exhibit P For Identification relate to core oils?

- A. Without examining it I wouldn't know.
- Q. You do not have to examine it at the present time, Mr. Ruddle. Do you know, without making a thorough search of it, whether all the notes in Defendants' Exhibit P For Identification are in your own handwriting?

 A. Yes, they are.

Mr. Aurich: I will next ask to have marked as Defendants' Exhibit Q For Identification the last of the note books produced by the witness, which can be identified by the fact that the name "A. B. Ruddle" is printed at the top of the cover and in about the center of the cover we find the letters and figures, "No. 2."

(The book was marked "Defendants' Exhibit Q For Identification.")

Mr. Aurich: Q. Without making a minute inspection of Defendants' Exhibits O and Q, can you tell me whether there are any matters contained therein that relate to subjects other than core oils?

- A. Well, I couldn't tell without going through it page by page, but I think they pertain principally, anyway, to core oil.
- Q. Without making a minute examination of Defendants' Exhibits O and Q For Identification, can you tell me whether all the notes contained therein are in your own handwriting?
- A. No, I couldn't tell you, but I think they are all in my own handwriting.
 - Q. You were present at the taking of the depo-

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
sition of Mr. Mc- [809] Swain at Mr. Hackley's
office on December 3, 1940? A. Yes.

Q. I want to call your attention to a question that was propounded to Mr. McSwain by Mr. Hacklev, which appears on page 10 of that deposition, and I will read it to you and I will ask you the question, I will then permit you to read the record, yourself. The question of Mr. Hackley is this: "Q. Yes. The statement here which I might tell you is attributed to you in original notes which Mr. Ruddle made after your conversation is, 'The Shell Company is always looking for a new market for one of their products. If a product has the merits that you claim for it I know Shell will make a better deal with you than any other concern because they have the finest sales organization in the United States; when they have anything to sell they really sell it.' "

You will notice that in that question Mr. Hackley suggests that you, at least, at that time, had some original notes of a conversation that you had with Mr. McSwain, which notes were made shortly after that conversation. Have you those notes with you?

- A. I did not—I don't recall any notes, but I do recall that conversation was had, and I related that conversation to Mr. Hackley.
- Q. Well, I am not so much concerned with the conversation at the present time, Mr. Ruddle. We will take care of that later. I am concerned, how-

ever, with whether or not you have any notes, such as Mr. Hackley suggests in his question to which I have directed your attention?

- A. No, I don't recall any such notes.
- Q. Did you make any notes at all of your first conversation with Mr. McSwain?
- A. No, I don't recall any notes that we made early, that is, prior to the Spotswood application.

[810]

- Q. In my last question, Mr. Ruddle, when I mentioned your first conversation with Mr. Mc-Swain I was referring to your first conversation with him regarding core oil in December of 1937. Did you so understand it?
 - A. Yes, that's the way I understood it.
- Q. At the next session of this deposition, Mr. Ruddle, will you produce, please, all correspondence that passed between you or Mr. Peck and either of the defendants in this case, or any of its representatives?
 - A. I think you have all of it; haven't you?
- Q. I exclude, of course, such correspondence as is attached to the complaint. [811]

Mr. Aurich: Q. Did I understand your previous testimony correctly, Mr. Ruddle, that you have no notes of any conversation had with any representative of either of the defendants in this case prior to the date of January 12, 1939, which is the date appearing on Defendants' Exhibit A For Identification?

A. Yes, I am sure that is correct.

Q. Now, attached to the complaint as Exhibit G is a copy of a letter that was written by you and Mr. Peck to the Shell Oil Company, dated September 6, 1939, which refers to some previous correspondence between you and the Shell Oil Company. In the fourth paragraph, the first page, of that letter you said, "We have long possessed copies of the reports made by your technical division prior to the date of our contract with you in which our product is reported favorably and the representations made by us with regard thereto are fully substantiated." I now show you the letter, that portion that I have read.

Mr. Hackley: Would you be good enough to advise Mr. Ruddle [812] he can read any part or all of the letter if he wishes?

Mr. Aurich: Yes; read the entire letter, if you like. What I had in mind, I wanted to know what reports you were there referring to.

The Witness: Have you the report here?

Mr. Aurich: Q. What reports did you there refer to?

A. It is Report TAC79 of February 24, 1938.

Mr. Hackley: Exhibit F-1 to the Bill of Complaint, Mr. Ruddle.

The Witness: Yes; and Report TAC No. 90 dated March 22, 1938, and marked Exhibit F-2.

Mr. Hackley: That is Exhibit F-2 to the Complaint.

Mr. Aurich: Are those the only reports that you refer to in the portion of the letter of September 6, 1939——

- A. That's right.
- Q. (Continuing): ——that I called your attention to? A. That's right.
- Q. Do you have in your possession any reports from either of the defendants in this case concerning the work done by them on your Core-Min-Oil which are not attached to the Bill of Complaint?
 - A. Only oral reports.
 - Q. Nothing in writing?
 - A. Nothing in writing.
- Q. You mentioned some work you did with Mr. Watson. Will you tell me when that was, please?
 - A. That was in 1929.
 - Q. Were you working for him, or with him?
- A. Oh, I wasn't working for him. He had a patented solution and I was trying to promote it for him, trying to find a market for it.
- Q. In other words, you were merely doing the promotional work? [813] A. That's right.
 - Q. What was this patented solution?
- A. It was made up of sodium silicate, aluminum sulphate, and sodium fluosilicate.
 - Q. What was it to be used for?
 - A. Fireproofing of lumber.
- Q. How long did you engage in that promotional work?

- A. Well, I don't recall just exactly; oh, several months. I went out to his place on Stanford Avenue and then I was unable to do anything with it, so I took it in to Mr. Peck's office in San Francisco.
- Q. That was just a very short interval of time there that you were working on that?
 - A. I would say three months, maybe.
- Q. I notice on page 214 of Defendants' Exhibit N For Identification the name of Stanley Bialos, together with his home phone, and his phone at the Caterpillar Tractor Co., and also his office phone with Mr. Charles M. Fryer. What was the occasion of your having Mr. Stanley Bialos' name?
- A. Stanley Bialos, I understood, was doing patent work, I think, for Mr. Watson.
- Q. That is, on this patented solution that you spoke of? A. Yes.
- Mr. Hackley: Mr. Bialos is an associate of yours, is he not Mr. Aurich?
 - Mr. Aurich: He is an associate of Mr. Fryer.
 - Mr. Hackley: And so are you?
 - Mr. Aurich: Yes.
- Q. Did you ever know a man by the name of H. B. Moses? A. Yes, I knew Mr. Moses.
 - Q. Does his name appear in your book?
- A. Well, it is probably in there, yes, because I had some dealings with Mr. Moses regarding patent work.

- Q. Was this in connection with the same matter you discussed with Mr. Bialos?
 - A. Yes, it was, and had to do with Mr. Watson.
 [814]
- Q. Now, before we proceed further, Mr. Ruddle, I think we can simplify matters if we can agree on some terminology; for example, we will use "Core-Min-Oil" quite frequently, and it has been used quite frequently. When that expression is used can we all understand that that means the core oil which you say you invented, which consists of the Ruddle Solution and asphalt?
- A. Yes, that's right; that includes the asphalt. I never claimed that I invented the word. The "Ruddle Solution" is a term given to it by the Shell Oil Company. We always used Core-Min-Oil which included asphalt.

Mr. Aurich: I merely want to get some convenient handles to talk about, just to make sure we are all discussing the same things; so we will understand that by "Core-Min-Oil" we mean a core oil consisting of Ruddle Solution plus the asphalt emulsion.

A. That's right.

Mr. Hackley: I don't mean to interrupt your thinking, here, but it seems to me it would be well to state on the record the Mr. Moses referred to a moment ago is likewise an associate, or was an associate of Mr. Fryer in this office, and of yourself.

Mr. Aurich: I am not quite clear on that. I can say Mr. Moses was in this office for sometime.

Mr. Hackley: And during the period involved in Mr. Ruddle's note-book reference to him; was that true? I don't know, I am asking you.

Mr. Aurich: I don't know.

Mr. Hackley: I knew he was here during a time—

Mr. Aurich: I don't know about that. I don't know when Mr. Moses' name appears in the book.

Mr. Hackley: When did Mr. Moses first come into this office?

Mr. Aurich: I wouldn't know. [815]

The Witness: I don't think he was in this office at the time I talked to him. He was with Mr. Evans, and then he was with—he told me he was operating independently.

Mr. Aurich: I think you are referring to Mr. Bialos there.

The Witness: Maybe he was in your office.

Mr. Hackley: Mr. Moses was at one time in my office, and one time he was in Mr. Aurich's office. So on the date when you referred to him in your note book back in 1929——

The Witness: Mr. Moses was in your office when I had dealings with him.

Mr. Hackley: That was back in 1929.

The Witness: That's right.

Mr. Aurich: Q. Mr. Bialos, when you had your

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
dealings with him, was either with Mr. Evans or
was working independently.

A. As I remember, he was with Mr. Evans at that time.

Mr. Hackley: That was back in 1929.

A. Yes, it was sometime in 1929 or 1930.

Mr. Aurich: Q. We have arrived at a definition of what we mean when we use the expression "Core-Min-Oil." When we use the expression "Ruddle Solution," now, we agree that we mean a solution composed of sodium silicate, aluminum sulfate, and sodium fluosilicate.

- A. If you want to call it that. We never did.
- Q. Well, merely for the purpose of handy reference, Mr. Ruddle, and rather than eliminate all of the three ingredients that were comprised in your solution, you have no objection if we identify it by "Ruddle solution"? A. No, no.
- Q. You will understand when I use the expression "Ruddle Solution" I am referring to the composition composed of the three chemicals I have mentioned?

 A. Yes, that's right. [816]
- Q. If it is agreeable to you, let us understand that when we use the term "Shell" that we are referring to both of the defendants in this case; that is, Shell Oil Company and Shell Development Company, unless I specify otherwise?
 - A. All right.
- Q. At the last taking of your deposition, which was in May, on page 22 of the record, I will show

it to you, you testified that the merits and stability of your Core-Min-Oil had been fully demonstrated and proved before you negotiated with Shell. Did you mean by that testimony to testify that prior to your negotiations with Shell your Core-Min-Oil had been developed into a stable product?

- A. No, I did not mean to testify to that.
- Q. What did you mean to testify, then, by your testimony that the merits and stability had been fully demonstrated and proved before your negotiations with Shell?

Mr. Hackley: Would you like to read the record at that point, Mr. Ruddle?

The Witness: Well, we thought we had the product where it was ready to be taken over by somebody like the Shell Oil Company, or a similar company that would complete the development of it. We had been able to make perfect cores, and the foundries considered the product to be an outstanding product.

Mr. Aurich: Q. What would your answer be to the question now if I asked you had the merits and stability of your Core-Min-Oil been fully demonstrated and proved before you negotiated with Shell?

- A. Well, I would say sufficiently enough to take it to some company like the Shell Oil Company.
- Q. Why some company like the Shell Oil Company?

- A. Well, the Shell Oil Company was a company that had all the facilities to iron out any little bugs that were in it, such as the softening of the core because of the CO₂ gas. [817]
- Q. You mentioned something about some foundries being fairly enthusiastic about this Core-Min-Oil. A. Yes, the foundries we went to.
 - Q. What foundry?
 - A. McCauley Foundry and the Vulcan Foundry.
 - Q. Is this prior to your going to Shell?
- A. No; we went to the Vulcan after Shell; they suggested the Vulcan Foundry.
- Q. I am confining your testimony prior to your going to Shell.
- A. Well, the Kingwell Foundry was another. That is all the foundries that I recall.
- Q. In other words, both of those foundries, the McCauley Foundry and the Kingwell Foundry, were enthusiastic about your product?
 - A. Yes, they were, very much.
- Q. Did they use it in their commercial operations?

 A. No, they didn't.
- Q. At the time that you turned your Core-Min-Oil over to Shell was it in a developed or undeveloped form?
- A. Well, sufficiently developed to warrant turning it over to somebody to sell, to iron out what we called the bugs in it. That was all discussed with the Shell Oil Company at the time; they knew it.

- Q. As a matter of fact, at the time you turned your Core-Min-Oil over to the Shell it was in an undeveloped form, was it not?
- A. Well, we didn't consider it an undeveloped form. We had trouble with it having the soft spots in it, but that happened only at certain times; at the McCauley Foundry I recall I had very little difficulty, because I made the cores during the noon hour, when the fires were off.
- Q. Well, as a matter of fact, Mr. Ruddle, one of your reasons for entering into the contract, or into the negotiations, I should say, which resulted in the contract between you and Shell, and which is in controversy, was the fact your Core-Min-Oil [818] was in an undeveloped form, and you turned it over to the Shell Company for them to develop it; is that right?

 A. That's right, certainly.
- Q. So it was in an undeveloped form when you turned it over to them?
- A. Well, I object to the word "undeveloped," because we were able to make successful castings out of this.
- Q. You don't recognize the term "undeveloped form" as being your own, do you?
- A. Well, it is possible; I think there is a letter written where the word "undeveloped" was used.
- Q. Yes, you wrote Shell a letter, didn't you, in which you told them you had turned the matter over to them in an undeveloped form?
 - A. That's right.

Mr. Hackley: May I see it?

Mr. Aurich: What objection have you now to the use of the words "undeveloped form"?

- A. I have no objection to the words.
- Q. I show you a letter which apparently bears the signatures of A. B. Ruddle and J. Lydell Peck, dated San Francisco, California, December 9, 1938, addressed to Shell Oil Company, the second paragraph of which reads as follows:

"The matter was turned over to you in that undeveloped form to experiment with and develop."

I will ask you whether that is your signature appearing above the typewritten words "A. B. Ruddle," and if that is Mr. J. Lydell Peck's signature appearing underneath.

A. Yes, it is.

- Q. That is your signature, and that is also the signature of Mr. Peck? A. That's right.
- Q. What matter were you referring to in the sentence that I quoted to you, and that appears as the first sentence in the second paragraph?
- A. That had to do with the application for the Spotswood patent, as I remember. [819]
- Q. You don't believe that had reference to Core-Min-Oil? A. Oh, yes, it did.
- Q. Well, let's read the first paragraph, which says:

"On April 8, 1938, we entered into a contract with you, in duplicate, one copy of which was

delivered to your company, the other retained by us. In that contract we provided for perfecting the material for foundry uses."

What was the material which you there referred to?

- A. The core oil, Core-Min-Oil, I think.
- Q. Then in the very next sentence when you say "The matter was turned over to you in that undeveloped form to experiment with and develop," you were referring to Core-Min-Oil?
 - A. That's right.

Mr. Aurich: The letter identified by the witness being one from Messrs. Ruddle & Peck to the Shell Oil Company, dated December 9, 1938, is offered in evidence as Defendants' Exhibit R.

(The letter was marked "Defendants' Exhibit R.")

Mr. Aurich: I am a little bit confused in some of your previous testimony, Mr. Ruddle, and I merely want to get some dates straightened out, if we can. I understand that you went to visit the Shell Company in connection with your Core-Min-Oil matter sometime which we fixed as, roughly, December, 1937.

- A. It might have been in the beginning of 1938.
- Q. Approximately that time.
- Λ . Yes, at sometime in there.

Mr. Hackley: I think his original testimony was either very late in 1937 or very early in 1938. Wasn't that it?

Mr. Aurich: Q. I want to fix again that time from the witness. I have no choice in the matter. I also understood your testimony to be that you first commenced to work at the McCauley Foundry about eight months before you went to Shell. [820]

- A. Something like that, yes; I would guess that is about right.
- Q. I am not trying at all to trap you or mislead you in any way. I am merely trying to fix a definite period of time as near as we can, so we can get our fingers on some particular time.
- A. That is my memory. It might not have been that much time.
- Q. Then if you went to Shell in the first part of 1938 and you commenced work at McCauley's about eight months before that time, that would be about May or June of 1937 when you commenced your work at McCauley's; is that about right?
 - A. Yes, I would say that it was.
- Q. In your previous testimony you mentioned that you had Core-Min-Oil in a state where it was ready to market at sometime while you were at Mc-Cauley's, and I don't understand whether that was two or three months after you first went to Mc-Cauley's or whether it was two or three months before you went to Shell. Can you tell me that?
- A. I would think it was about two or three months before I went to Shell. It was during that time; we had negotiations with the American Bitumals Company quite a little while.

- Q. You will recall that at your previous deposition I started to interrogate you about the percentage of ingredients that you used in your Core-Min-Oil at various times, and if I understood your former testimony you testified that in approximately the month of June, 1937, you had completed the development of your Core-Min-Oil.
- A. It was a little later than that; I think it was about three months prior——
- Q. I am not questioning the date. I merely want to refresh your recollection. A. Yes.
 - Q. As to the particular date.
- A. I was trying to estimate it there. I didn't fix any particular month. [821]
- Q. Now, will you take your notes, please, all that you have produced here, and tell me by means of any notes, or in any other way that you can, the percentage of each of the ingredients you used in your Core-Min-Oil, both in grams and cubic centimeters at the time that you completed the development of it?

Mr. Hackley: I assume that by "completed the development" you mean at Vulcan Foundry, this date two or three months before he went to Shell?

Mr. Aurich: I mean the time that the witness spoke of when he said he had completed the deveolopment of his Core-Min-Oil at the McCauley Foundry.

Mr. Hackley: Yes, that's what I understand.

Mr. Aurich: Which date we have tentatively fixed as of June, 1937.

Mr. Hackley: Somewhere in that neighborhood, yes.

The Witness: One formula that I find here was 1750 cubic centimeters of dry Del Monte sand and 80 cubic centimeters of solution, and 50 cubic centimeters of asphalt emulsion. I think that formula made the best one we had. Now, for certain purposes they used a great deal more sand in that and a little water, depending upon the strength they needed for the core, but that made, I think, the best core, the one I just gave you, that formula, I think, is the best one we found.

Mr. Aurich: Q. That formula is found on the second page of the notes, Defendants' Exhibit L For Identification? A. That's right.

Q. Is it your opinion that that is the formula which you arrived at after experimenting and you concluded it was the best when you completed the development of your Core-Min-Oil at McCauley's Foundry?

A. Yes, best for purposes where it required a better [822] core oil.

Mr. Aurich: Q. When you gave us the formula just a moment ago that appears on the second page of Defendants' Exhibit L For Identification you gave it in your own words, and you were not reading what is there written, is that correct?

A. No; I was giving it in my own words.

- Q. I notice that in the formula it says "80 cubic centimeters solution 32 degrees Baume." What does that mean?
- A. That means the consistency of the solution, the weight of the solution.
 - Q. What was the solution?
- A. The solution was made of sodium silicate, aluminum sulfate, and sodium fluosilicate.
- Q. What were the percentages of each of those that were contained in your 80 cubic centimeters of solution that you refer to?
- A. That would be 1 gallon of water, 1 ounce of aluminum sulfate, 1 ounce of sodium fluosilicate.
- Q. In your last answer you say that "would be." Was that what is contained in this 80 cubic centimeters of solution referred to?
- A. That's right, and 2 gallons of sodium silicate.
- Q. Perhaps I don't understand the subject. Do you mean 80 cubic centimeters of solution of 32 degrees Baume contained all that?
- A. No. I am describing what 32 degrees Baume means.
- Q. What I want to find out was this 80 cubic centimeters of solution that you had, how much of sodium silicate did you have, for instance?
 - A. I would have to figure that out.

Mr. Hackley: I think you can reach it if you ask him to state the formula of the solution.

Mr. Aurich: I would rather get at it this way.

[823]

The Witness: That is what I just—

Mr. Hackley: You can calculate it from your 80 centimeters—

Mr. Aurich: I would rather have the witness do it.

The Witness: I could if you can give me some time.

Mr. Aurich: Right now you don't know how many cubic centimeters of any of the ingredients making up Ruddle Solution was contained in the 80 cubic centimeters of solution referred to on the second page of Defendants' Exhibit L?

A. No, I wouldn't know how much. The only thing you can do would be to have a try at it, because some of the solids that becomes insoluble and go into solution, but you could not tell by volume.

Q. What are these figures on the second page of Defendants' Exhibit L in the right hand side, will they help you at all?

A. No. They were figured by—I don't recognize them. They are my figures, but I don't recognize what they were for. Apparently they had to do with some measurement I was making at the time I ran a test.

Q. Do you believe the formula for making cores consisting of the sand and solution and the asphalt emulsion which is set forth on the second page of

Defendants' Exhibit L is the optimum formula for making cores with your solution and asphalt emulsion?

- A. Well, now, in making cores, some cores have to have strength, others don't require so much strength, and even in foundries that have a set formula they are changed all the time; many ingredients are put in them that serve a certain purpose, so if you would increase the sand in this formula that I gave you it would be necessary to add some water or you would not have the right consistency, and by increasing the sand you make a weaker core, and in some parts of foundry work it is required to do that, make weaker cores. [824]
- Q. We are digressing just a little bit. I am talking about the conclusion you arrived at at a date that we have tentatively agreed would be as of June, 1937, and you have told me that when you completed the development of your Core-Min-Oil this formula appearing upon page 2 of Defendants' Exhibit L For Identification was the one that you adopted.

 A. That's right.
- Q. Now, at that tme, did you consider that formula the optimum formula for making cores?
- A. I tried to explain to you that you can't have the same formula for every kind of a core.
- Q. Did you consider it the optimum formula for making any kind of core? A. Yes.
 - Q. What kind?
 - A. Well, cores that required strength.

- Q. That does not mean anything to me. What do you mean by a core that requires strength, what type is that?
- A. Engine heads, in motors, they require it; they have very thin edges that have to be filed. In that kind of a core it was the formula that was best.
- Q. This formula appearing on page 2 of Defendants' L was the best formula, or the optimum formula, that you found for making cores that required strength?

 A. That's right.
- Q. I notice the formula doesn't call for the addition of any water.
- A. No; that was with dry sand and makes the right consistency.
 - Q. What type of cores do not require strength?
- A. Well, where they fill the center of the core, for instance, they save core oil by making a weaker core.
 - Q. What?
- A. They use in that instance—Well, they would increase the water and also increase the sand.
- Q. In other words, they would add more water, add more sand?
- A. That's right. If you add more sand it would be too dry; you [825] would not get a good mold.
- Q. Would you then lessen the amount of solution?
- A. Well, you would lessen it if you add more sand.

- Q. In percentage you lessen it? A. Yes.
- Q. That is what you are driving at?
- A. That's right.
- Q. Can you find any other formula for making your Core-Min-Oil in any of the other documents you have given me?
 - A. Well, it gives several others here.
 - Q. Will you give them to me, please?
- A. I had made records where we tried the asphalt with variations but I don't find them in these books.
- Q. I am only concerned with the ones that you decided were satisfactory; I am not concerned with any failures you may have had.
- A. I don't find it here, but I remember using 2100 cubic centimeters of dry sand and 80 cubic centimeters of solution, and 50 cubic centimeters of asphalt emulsion, and 20 cubic centimeters of water.
- Q. Any other formula that you can recall, will it vary between those two?
- A. Yes, I think that is the most sand I used, where they had strength enough to use them.
- Mr. Hackley: This was all at the time of the McCauley Foundry work?

The Witness: Yes.

Mr. Hackley: Before you dealt with Shell?

The Witness: Yes, and one I have there we used a little stove oil in it, which helped prevent the sticking and drying out on the bench; that was only

5 cubic centimeters. I remember that size formula that I just gave.

- Q. If a core oil was made which consisted of sodium silicate, aluminum sulfate, and asphalt emulsion, would it make a satisfactory [826] core?
 - A. To eliminate the bugs?
 - Q. Yes. A. No, it wouldn't.
 - Q. Why not?
- A. Because it would be hydroscopic, would draw moisture; our tests showed that.
 - Q. Where did you make any tests?
- A. We made those tests at the McCauley Foundry, the Kingwell Foundry, and, I think, at the Vulcan Foundry after the Shell was interested in it.
- Q. The conclusion that you arrived at, at least, was that you could not make a satisfactory core unless you included the sodium fluoride occurring in combination with the other ingredients I mentioned?
- A. Yes. I might be mistaken about trying that at McCauley's Foundry, but I know I did at the Vulcan Foundry.
- Q. If you made a core consisting of sodium silicate, sodium fluosilicate, and asphalt emulsion would that make a satisfactory core?
 - A. I don't know that I tried that.
 - Q. Have you any opinion on that subject?
- A. I would say that the sodium fluosilicate would react with the aluminum sulfate and throw

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
down a precipitate, and that would leave this sodium silicate.

Q. You notice I did not have any aluminum sulfate in the last core oil I mentioned.

A. Well—

- Q. So it would be impossible for the sodium fluosilicate to react with the aluminum sulfate.
- A. No; I meant with the sodium silicate. That is the two you were putting together.

Mr. Hackley: May I hear the formula you are now referring to?

Mr. Aurich: Yes. I am going to read it. In other words, if you made a core oil consisting of sodium silicate, sodium fluosilicate and asphalt emulsion, your opinion is that it would [827] not make a satisfactory core because the sodium fluosilicate would react with the sodium silicate?

A. Yes.

Q. Had you made a test to determine that?

A. Oh, I have made tests to determine that, but not with core oil.

Q. If you made a core oil consisting of sodium silicate and asphalt emulsion would it make a satisfactory core?

A. No. We tried that, and it became hydroscopic.

Q. In other words, you mean the sodium fluosilicate prevents it from dropping down?

A. You need the three of them together, the

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
aluminum sulfate, the sodium silicate and sodium fluosilicate.

- Q. I thought you mentioned a while ago that if you made a core oil consisting of sodium silicate, aluminum sulfate, and asphalt emulsion you said it would not make a satisfactory core because of the absence of sodium fluosilicate, which would cause it to become hydroscopic. A. That's right.
- Q. If you put the sodium fluosilicate into the combination without the aluminum sulfate will it still become hydroscopic?
 - A. Yes, it will; I am sure of that.
 - Q. But that is the one thing you never tried?
 - A. No, I have not tried that.
- Q. How many times did you ever try to make a core oil out of sodium silicate alone and asphalt emulsion?

 A. Many times.
- Q. You were never able to make a satisfactory one?
- A. Well, never made a satisfactory core, but if you expose it to moisture it softens up.
- Q. I take it if a foundry to-day was using a core oil composed of sodium silicate and asphalt emulsion you would not consider that they were using your Core-Min-Oil?
- A. No, I won't say that was using Core-Min-Oil, no.
- Q. Do you have any knowledge as to whether the use of sodium [828] silicate as a core oil, or as

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
one of the ingredients making up a core oil, was new with you, or was it something that was well known long prior to the time you entered the core oil field?

- A. Well, it was new, as far as I was concerned.
- Q. You had no knowledge that sodium silicate in one form or another had been tried by foundries for many years prior to your entering the field of core oils?
- A. I was told when I worked in the foundries that they had tried sodium silicate, but not with asphalt.
- Q. Were you told what the results of those tests were, or those attempts to use sodium silicate were?
 - A. They just said they were failures.
- Q. Do you know of your own knowledge of any core oil containing sodium silicate that has ever been successfully commercially manufactured and sold?
 - A. No, I do not.
- Q. Will you name all of the foundries in which you attempted to use your Core-Min-Oil prior to your first visit with Shell in December, 1937?
- A. The first one I went to was the Santa Fe Foundry, at Richmond. Then I went to the Kingwell Foundry, at Natoma street, in San Francisco. Then I believe I went to the Enterprise Foundry, here in San Francisco, and then I think McCauley was next.
- Q. In connection with that question, and all subsequent questions concerning your work on

cores, Mr. Ruddle, I would first like to have you answer the question as best you can from your recollection, then if after you have exhausted your recollection you believe there will be anything in your notes that will assist you in further answering the question please feel free to refer to your notes, because I am just seeking the information. For example, did you ever work at the Pacific Foundry?

A. No. Here [829] in San Francisco, you mean?

Q. I don't know where it is located.

A. No, I never worked there.

Mr. Hackley: That is before he went to the Shell with this product?

Mr. Aurich: That's right.

Q. Did you ever work at the Oakland Steel Foundry?

A. Yes, I did. I went up there, I think, for two days. I made three cores there, they were filled with water, and then they blew up because of the moisture in the cores. Then I made another one, and the fellow that made it, they were just rough, I asked him to make another, and he refused. So I picked up all—one of the men working there told me, he used to be at McCauley's, I knew him, he said, "This fellow is afraid of his job, he won't even allow you to do any experimental work here"; so I picked up the things I had and left.

Q. Well, then, we can forget the Oakland Steel Foundry, as far as my purposes are concerned.

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
Following your work at Santa Fe you went to Kingwell?

A. That's right.

- Q. Do you have any independent recollection of the work that you performed in that foundry in detail?

 A. Well, on Kingwell——
- Q. Well, answer "Yes" or "No," and I will proceed with my questions.
 - A. Yes, I remember.
- Q. Do your notes also show the nature of the work performed by you at Kingwell?
- A. I couldn't find anything in my notes regarding Kingwell.
- Q. When did you do the work at the Kingwell Foundry?
- A. Well, it was just prior to going over to the McCauley Foundry.
 - Q. That would be—
- A. Probably it is two or three months within that time. [830]
- Q. That would be probably in March, from March to May, 1937?
 - A. I would think something like that.
 - Q. What materials did you use over there?
- A. Well, I think, if I remember right, I used a red oil.
- Q. That was the same sort of red oil that you used at Santa Fe?
 - A. Yes, and I think a pale oil there, too.
 - Q. You also used that at Santa Fe?

- A. There were just two oils that the Standard Oil Company gave me.
 - Q. They were mineral oils?
- A. They were mineral oils, and they told me they were cheap oils, they had no market for them.
- Q. What were the percentages of oils and solution that you used?
- A. I haven't that. I couldn't recall just exactly how much I put in there.
 - Q. Have you any approximation?
- A. I would say similar to approximately the amount of oil that I used of asphalt emulsion that is given in that formula.
- Q. By "that formula" you mean the formula on page 2 of Exhibit L For Identification?
 - A. That's right.
- Q. What changes had you made in the formula at Kingwell from that used at Santa Fe?
- A. Well, I wouldn't recall. I know I was working along the same line.
- Q. Do you recall whether you made any changes or not?
- A. No, I can't recall at this time. I don't seem to find any notes on it. I know I did have notes on it, but I can't find them.
- Q. To digress a minute, you said something about possibly giving Shell some notes.
- A. Well, when we made the contract with Shell I gave them everything that I had that they thought might be useful.

- Q. Whom did you give them to?
- A. Possibly Mr. Waller. Mr. [831] Waller was very active at that time with us.
 - Q. You say "possibly".
- A. Well, I am not very sure as to who I gave them to. I have no independent recollection of giving anything to anybody.
- Q. Don't you recall that at the previous session of your deposition you testified that when you entered into the contract with Shell you thought that was all there was to it, and therefore destroyed a great many of the notes you made?
- A. Yes, I think it is true, a great deal of my early tests and everything were thrown away when we entered into that contract.
- Q. You are not at all certain now that you ever did give any representative of Shell any of your notes with your product, are you?
 - A. No, I am not certain.
- Q. Now, going back to the Kingwell Foundry again, can you tell me the ratio of sand to oil that you used?
- A. No, I can't; I haven't any independent recollection other than this formula that we find through here, through the records I have shown you.
- Q. I don't understand what you mean by that last answer, Mr. Ruddle. Can you explain it a little bit for me?

- A. Yes, I will explain it to you. I was working along general lines of trying to combine oil with sodium silicate solution.
 - Q. That is what we call the Ruddle solution?
 - A. Do you want me to call it Ruddle Solution?
 - Q. If you will, please, here.
- A. All right. I used in it at one time at the Kingwell Foundry a certain amount of resin, it was a product of resin, I think it was called Beckolbase; it was a synthetic resin. I tried to incorporate that and put it in one package. That was tried at the Kingwell Foundry; I remember that, but the proportions of it——
- Q. The answer to my question then is you do not now recall the [832] ratio of sand to core oil that you used at the Kingwell Foundry?
 - A. No, I don't recall.
- Q. How did you mix the sand and oil at the Kingwell Foundry?
- A. If I recall, they mixed it on the floor with a shovel. They would put the sand on the floor and then make a puddle on top.
 - Q. Sort of a hand mix?
 - A. They used a shovel.
- Q. That is what you did, too? I am not speaking of Kingwell.
 - A. That is the way I did it, too.
 - Q. You, yourself, did the same thing?
 - A. Yes.

- Q. How much time elapsed between the mixing of the sand and the placing of the sand in the core box?
 - A. They put it in different; I would say—
 - Q. You say "they" would do it.
 - A. That is the core men at Kingwell's.
 - Q. You weren't making these experiments—
- A. I think they only had two men there. I think Earl Friend was the man's name that I worked with.
- Q. What I am trying to drive at, were you doing this yourself or were you telling somebody else what to do and they would do it?
- A. Well, I did it, myself, they did it; we all tried it.
- Q. Well, just let's take some cores that you made, how much time elapsed between the time of the mix and the time of the placing of the sand in the core box?
- A. Oh, I will say we put it in the core box immediately after it was mixed.
- Q. How long did the sand and oil mixture remain usable after it was mixed?
- A. They could mix it in the morning and use it that day; they couldn't use it the next day.
- Q. Would it stay usable for as long as four hours?
- A. Well, it was only in small batches and they generally used up what they made, and the rest

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
was thrown out, if they had mixed [833] their own stuff.

- Q. Well, did they ever make any mix with the core oil you were then using, and sand, and let the sand remain for as long as four hours before using?
- A. Yes, because they had a box, they had a chute, I think they called it, where they had the stuff on top, and they covered it with a sack, and it came down, it was an air-tight chute, it came out the bottom; that is the way they used it on their own stuff.
- Q. In other words, it was contained in an airtight container, and also covered with wet sacks?
- A. Yes. They took it from the opposite side of the bench, they came around and took it to the other side where the table is. [834]

Mr. Aurich: Q. Are you a chemist, Mr. Ruddle? A. No, I am not.

- Q. We were talking of your work at the Kingwell Foundry during the period of approximately March to May, 1937, you recall, just prior to the recess. Was your work at Kingwell during that entire period or just during a part of that period?
- A. No, I only worked there for probably two or three months, and then I didn't go back any more.
 - Q. That was two or three months continuously?
- A. Yes; I would say it was off and on, anyway. I wouldn't be there every day because I was running tests at my apartment, and then if I found

Defendants' Exhibit DDD—(Continued)
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something I wanted to try I would go down and try it.

- Q. Going back again to the mixing of the material at Kingwell, just what procedure did you follow with respect to adding your core oil to the sand? By that I mean what ingredients did you put in first, what ingredients did you put in second, or did you put them all in at once, or just how did you do that?
- A. As I remember, we put the Ruddle Solution in first. I might be mistaken about that. I believe I did try to put that in one package and take it down there and it would separate, so I would have to agitate the jar, or the can, that I had it in, and then pour it into the sand that had been placed on the floor. If my recollection is right that's the way I did it at the time.
- Q. First placed the Ruddle Solution. You would then stir it [835] thoroughly? A. Yes.
 - Q. With the shovel?
- A. They used a shovel before they would put the outside sand in until it had used up all the moisture, they mixed with shovels, back and forth in different piles.
- Q. Then when you finished that first operation of thoroughly mixing the sand with your Ruddle Solution, then you added the red or pale oil?
- A. No. I think that pale oil was not added or separated from the Ruddle Solution. That is, you

had to agitate the solution and the oil together in the can, or jar.

- Q. Was all your work at Kingwell on this, shall we say, ready-to-use core oil, or did you do any work down there when you added the various ingredients separately?
- A. I think they were all in one package at that time, if I recall rightly.
- Q. Who was present during these experiments you performed at Kingwell's Foundry?
- A. Well, I remember the core-maker there, by the name of Earl Sand, I think, or Land, I think it was Earl Land.
 - Q. No one else?
- A. No, that was all at the Kingwell Foundry. The foreman of the foundry was interested in it, and was there part of the time.
- Q. Was Mr. Peck ever at the Kingwell Foundry?
- A. Oh, he came over, I believe, probably once or twice, maybe, when I was there. I don't even recall that he did.
 - Q. I mean Mr. Lydell Peck.
 - A. Yes, that's right.
 - Q. By the way, Mr. James F. Peck is dead?
 - A. Yes, he died in October, 1939, I think.
- Q. Can you tell me what variations in percentages of ingredients you used in making your core oil at the Kingwell Foundry?

- A. No, I could not at this time; I couldn't recall what they are.
 - Q. You did have various variations, I presume?
- A. Yes, we tried [836] in every known proportion that I could figure out; I know that.
 - Q. What was the purpose of that?
- A. Trying to determine the best possible mixture to be used for this purpose.
 - Q. How many cores did you make at Kingwell?
- A. That would be hard to estimate. I think it covered a period of three months. I was there several days a week, and sometimes I took as many as four or five different samples with me.
- Q. You have no idea, then, as to the number of cores you made there?
 - A. No, I wouldn't.
- Q. How many cores did you make at any one time?
 - A. Well, possibly from ten to twenty.
- Q. What was the condition of those cores, did they vary, or were they all good, or were they all bad, or what?
- A. Well, they were not all good. I had trouble with the gas in that oven at times, but not all the time; part of the time the fire was on it didn't seem to affect them. They had a machine there, I have forgotten the name of the core it made; they put the material in it and it was turned with a motor and these stock cores, I believe they call

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
them, they were from half an inch to two inches

them, they were from half an inch to two inches in diameter.

- Q. What kind of a foundry was Kingwell's?
- A. Brass foundry.
- Q. How much time elapsed between the time of the making of a core and the baking?
 - A. At the Kingwell Foundry?
- Q. Yes. All these questions, you understand, please, are directed to your work at the Kingwell Foundry.
- A. I don't remember that we made very many castings at the Kingwell Foundry. We made a lot of cores, but we made some cores that he put in a place that he called his store shed, to see whether or not they would draw moisture.
- Q. Perhaps my question was inadequately phrased. I meant how [837] much time elapsed between the making of the core and the cooking of the core; is that a correct question?
 - A. Yes, baking.
- Q. Didn't you usually bake your cores after they were made?
 - A. Yes, we did, all of them.
- Q. How much time elapsed between the making of the core and the baking?
- A. Some were baked right away and some were baked within an hour or two.
- Q. Would you say one to two hours was the outside limit?

- A. No, I wouldn't want to say, because I haven't any recollection. That didn't enter into it at that time, that I knew of.
- Q. You mentioned something about the storing of the cores. Were they kept very long after they were baked?
- A. Yes. That is, the stock cores that they made in that foundry, they were probably two feet long, and ranged from half an inch up to three inches in diameter.
- Q. How long did they keep those cores after they were baked?
 - A. They had them for months.
 - Q. What was their condition, generally?
- A. Well, they commented on the fact they were in excellent condition, and they had been kept.
- Q. Did you make many castings of cores made with your oil?
 - A. Not very many castings there, no.
- Q. Can you tell me how many castings you made?
 - A. No, I wouldn't be able to tell you.
- Q. Can you tell me how many satisfactory castings you made?
- A. Well, I know this, that every one we did make was satisfactory.
 - Q. You have no idea as to the number?
 - A. No. There wasn't a great many.
 - Q. How many sizes of cores did you make?
 - A. Well, there were [838] not large cores, I re-

member that. They made quite a lot out of this machine that they have there that turns out the cores through this process.

- Q. They were all small cores, were they?
- A. Yes, and then we made several different sizes of cores, I don't know the names of them, or what they were for.
 - Q. How many cores did you make at a time?
- A. Oh, they had a little iron plate that possibly held two to four cores at a time; some only had one on it.
- Q. Would there be various sizes of these cores that were baked at one time, or did you make all of one size at one time?
 - A. I think all of one size at one time.
- Q. You would not have a small core, for instance, or a large core baked at the same time?
 - A. No, not at Kingwell's, I wouldn't think.
- Q. How about the thickness of the cores, did they vary greatly?
- A. Well, I would say they were right around half an inch, up to four inches.
- Q. What form of ovens did you say they had there?
- A. They had a direct fired oven, an oven that has the fire in the bottom of it.
 - Q. A rather small foundry, I take it?
- A. Yes, it is a small foundry; just a brass foundry.
 - Q. How much time would you say was spent

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
on the entire operation from the time you first
commenced to mix the sand until the core was taken
out of the oven?

- A. That would be hard to tell. They were working on orders that came in from other places. I know they made a bearing there, I think it was for Chrysler, and they were always working on that. I worked in at times when I didn't interfere with them, the best I could, and they would [839] start on mine and then they may leave off for an hour or two and come back and work on it. It would be hard to tell just how long the operation took.
- Q. What time of day did you work down there, generally?
- A. Well, I would go down there about half past eight, probably, in the morning. Then I would go away at lunch time and stay there until the close, about 4:00 or 4:30, as I remember.
- Q. You would not use the furnace when the fires were off during the noon hour?
- A. They generally used their fire right straight through at that place. They were short of ovens.
- Q. Did you advise the various individuals with whom you worked at Kingwell what the ingredients of your solution were?
 - A. I don't think that I did.
- Q. Did you tell anyone at Kingwell's that your solution contained sodium silicate?
- A. It is possible, but I don't have any recollection of telling anybody anything about it.

- Q. By the way, where did you obtain the sodium silicate that you used at Kingwell's?
 - A. I think at Braun-Knecht-Heimann.
 - Q. Was it powdered, dried form?
 - A. No, it was in liquid form.
 - Q. What was the degree Baume?
 - A. 40 degrees Baume, I believe, they claimed.
- Q. Have you ever experimented with cores made with Core-Min-Oil of a degree Baume sodium silicate other than 40?
- A. No, I don't believe I have, not very likely. I tried some of them powdered.
- Q. I am talking now of, for example, did you ever use the 32 degrees Baume sodium silicate in your Core-Min-Oil?
 - A. Just straight sodium silicate, no.
- Q. No. I mean as one of the ingredients in your Core-Min-Oil. A. No. [840]
- Q. Do you know what difference, if any, would result in the cores made with your Core-Min-Oil if you used a 32 degree Baume sodium silicate instead of a 40 degree Baume sodium silicate, what that would be?

 A. No, I couldn't tell you.
- Q. Do you know whether or not there would be any difference?

 A. No, I couldn't tell you.
- Q. What sort of equipment did you have at Kingwell's for testing the cores which you made?
- A. Well, a foundryman sizes up a core and they take a file and cut up one to see the edge that they

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
made, and that governed entirely as to what we were doing.

- Q. Did you have any equipment at all to make any test of the cores you made? A. No.
- Q. You just took the foundryman's word for it that that was a good core or was not a good core?
 - A. Yes.
- Q. You made no attempt to measure the tensile strength of the core? A. No.
- Q. Did you ever make any attempt to test the absorption of moisture in the core?
- A. None other than seeing them. They have a rack there, as I explained to you, and in that rack they are placed, and after they are there for a while they get curved, get crooked. That is due, as they explained, it was due to the absorption of moisture.
- Q. Is that what is commonly referred to as warping?
- A. I don't know about that, I never heard it called warping, but they are not straight. All of those straight sides were turned up.
- Q. In other words, you would go into the storeroom and see some cores of theirs that would be a little curved, and you would see some cores of yours that were straight, and from that you would conclude that your cores had not absorbed any moisture?
- Λ . That is what they told me. That is the way they explained it. [841]

- Q. You made no effort to measure the absorption of moisture?

 A. No.
- Q. Did you ever make any test to determine the green strength of the sand after it was mixed with the solution of yours?
- A. I don't know what you mean by "green strength." You mean before it is baked?
- Q. Do you know the meaning of "green strength" of a core sand? A. No.
- Q. Did you ever make any test to determine the hardness strength of the core? A. No.
- Q. Did you ever make any test to determine the collapsibility or friability of the core?
 - A. Well, we did in McCauley's Foundry.
 - Q. Not at Kingwell? A. No.
- Q. We will also include all work done by you on your Core-Min-Oil, but exclude the experimental work that was done by Shell, and I want to ask you a series of questions about all of it, and we will put that into the bag and forget it. Did you ever make any test to determine tensile strength of any cores made by you at any time?

A. No.

- Q. Would the same answer be true with respect to tests as to the absorption of moisture? I am speaking of tests other than visual observation.
 - A. No, I never have.
- Q. Was your experience such at the time you went to Kingwell's that you could tell whether a core absorbed moisture or not?
- A. Well, the only test that we gave it when we poured the casting [842] was, if it has moisture in it, substantial amount of moisture in it, why, it will expand. We saw that in the cores—
- Q. What I am driving at is this: At the time you went to Kingwell you have mentioned that you would go into this store-room and would find some cores that were curved or warped, and you would find some that were straight. At that time had you had sufficient knowledge and experience in the foundry art, you, yourself, to be able to tell what the cause of that was?
 - A. No. I just had to take their word for it.
- Q. At any time during your work with core oils, did you ever make any test to determine the hardness of cores made by your Core-Min-Oil?
 - A. No, not in the sense you are talking about.
- Q. Did you ever make any test to determine the collapsibility or friability of any cores made by you with your core oil?
 - A. No, not the way you are talking about.
- Q. The next foundry that you went to, if I remember correctly, was the Enterprise?

A. Yes, I went to the Enterprise, I think for just probably a couple of weeks, is all.

Q. Have you looked through your notes, Mr. Ruddle, recently, to determine whether or not there is anything in there that would enable you to answer any of the questions I have asked you concerning your work at Kingwell's?

A. I haven't been able to find anything.

Q. The point is, have you looked through them?

A. Yes, I have looked.

Q. Just recently? A. Yes.

Q. How recently?

A. Well, I think after you started my deposition. After that I made a search for what I could find.

Mr. Hackley: You mean say six months ago, something like that? A. Yes. [843]

Mr. Aurich: Q. You mean it has been six months since you have looked through your books?

A. Yes, it has.

Q. I am going to ask you at the conclusion of the session this evening, Mr. Ruddle, to take your notes, if you will, and go through them and refresh your recollection as to what is contained in there, because I intend to ask you a series of questions about your work at the Enterprise Foundry, and at McCauley, and perhaps we can save time if you could do that this evening rather than going ahead now, unless you know whether or not there is any-

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
thing in them about the Enterprise. Do you know
if there is anything in there about that one?

A. I don't think there is a thing in there about the Enterprise.

Mr. Hackley: I think it would be more orderly if the witness follows your first suggestion, Mr. Aurich.

Mr. Aurich: Q. Did you ever make any attempt to interest any core oil manufacturer in the manufacture and sale of your Core-Min-Oil?

A. We attempted to interest the American Butimals Company.

Q. Are they Core Oil manufacturers?

A. No. They make an asphalt emulsion.

Q. I am speaking of core oil manufacturers.

A. No, I don't think we did.

Q. Do you know the names of any core oil manufacturers?

A. No, I don't even know the names of any. I think Quandt is one. That is the reason I left the Enterprise Foundry, I found out Quandt was a brother-in-law of Hayne, the owner of the Foundry.

Q. You mentioned something this morning about the fact that Shell had great facilities for something or other, and that is the [844] reason you took your core oil to them. What great facilities did you have in mind, Mr. Ruddle?

A. I don't recall making that remark.

Q. Well, let me ask you the question, then: Why did you take your core oil to Shell?

A. Because this Core-Min-Oil involved the use of asphalt emulsion, and the Shell Company manufactured asphalt emulsion, and I thought that was a likely market.

Q. That was your only reason for going to Shell?

A. We had previously been to the Standard—to the American Bitumals Company, and they offered us a contract that we were not satisfied with, we were looking for somebody to sell this Core-Min-Oil.

Q. You have named one reason why you went to Shell with your Core-Min-Oil.

A. I will give you another one.

Q. I am now asking what other reasons did you have.

A. I knew Floyd McSwain, I went to school with Floyd McSwain in Merced.

Q. You were a very personal friend of his?

A. I was.

Q. Any other reasons for going to Shell?

A. No, I don't recall any other reason. We were looking for a market.

Q. You mentioned something this morning that you were encountering little difficulties with your core oil, and that was the reason you took it to Shell, if I understood your testimony correctly. Is that also one of the reasons you took it to Shell?

A. No, I wouldn't say that was the reason we took it to the Shell Oil Company, or to any other

company. The Shell Oil Company didn't add anything to it. The bugs still existed. The Shell Oil Company found out that if it was cooked in a gasfree oven it made a perfectly good core. That is all they did, was locate the sort of an oven we could do it in.

- Q. That is something you had not done before?
- A. That was some- [845] thing that we didn't know about.
- Q. When was the first time you were over in a foundry?
- A. I think the Santa Fe Foundry, at Richmond, was the first foundry that I was ever in.
 - Q. Can you give me the date of that, again?
 - A. Well—
 - Q. Shortly before April or May, 1937?
- A. Yes, I would say so. It was about a year before we took it to Shell.
- Q. You can't give me any idea of where the thought came to you of using this so-called Ruddle Solution and asphalt emulsion as a core oil, where it came from?
 - A. No, I don't recall how I ever thought of it.
- Q. Prior to your obtaining the idea, you had never even been in a foundry, had you?
- A. No, but I no doubt had talked to plea that had been in a foundry, but I don't recall who it was.
- Q. In your previous testimony, at page 20, you testified that after you determined the best ratio of Core-Min-Oil to be used you had trouble in getting

Defendants' Exhibit DDD—(Continued)

(Deposition of Allan B. Ruddle.)

the cores soft at times, and also that the sand dried badly on the bench. I want you now to tell me, using your notes, or whatever other information you may have, what you then considered to be the best ratio of the various ingredients making up your Core-Min-Oil that you referred to in that place in your testimony?

- A. Well, I gave it to you this morning, I think.
- Q. In other words, the best ratio of your Core-Min-Oil that you referred to on page 20 of your testimony consists of 1750 cubic centimeters of fine Del Monte sand, 80 cubic centimeters of solution, 32 degree Baume, and 50 cubic centimeters of asphalt emulsion. A. That's right.
- Q. What does the "solution 32 degrees Baume" mean that is in the [846] formula appearing on the second page of Exhibit L?
 - A. What does the 32 mean?
 - Q. 32 degrees Baume.
- A. That is the Baume of the solution after it is made up, and includes the sodium silicate, aluminum sulfate, and sodium fluosilicate, and water.
- Q. Water included in this—I am referring to the 80 cubic centimeters of solution. A. Certainly.
- Q. What degree Baume sodium silicate did you use in that particular formula?
 - A. In mine that is 40 degrees Baume.
- Q. Do I understand you correctly that you never at any time experimented with a 32-degree Baume sodium silicate? A. Not that I recall.

Mr. Hackley: You are now referring to his personal experiments?

Mr. Aurich: That's right. I am not referring now to experiments carried on by Shell.

Mr. Hackley: Either in his presence or not.

Mr. Aurich: In addition to the difficulty which you mentioned of fast drying on the bench and softening of the cores at times, did you experience any difficulty because of the impossibility of obtaining a stable mixture of emulsion and solution, that is, that your Core-Min-Oil had to be mixed with the sand immediately before using?

A. No, I did not, because of that. When I took it to Shell I took it in two packages, I didn't try to do it in one package.

Q. You never had endeavored to place it into a ready-to-use core oil before taking it to Shell?

A. Well, I did put them together, but I never attempted to make them stay in an emulsion.

Q. In addition to those difficulties which you have previously [847] enumerated with your Core-Min-Oil did you ever experience any difficulty because the cores were not sufficiently friable or collapsible?

A. Not when we put the asphalt emulsion, used that.

Q. They always had good collapsibility?

A. Yes, it did.

Q. In addition to the difficulties enumerated, did you ever experience any difficulty because your cores

were not homogeneous in degree of hardness and a soft crust would form on the cores?

- A. No, not when I used it in the two packages.
- Q. Didn't the carbon dioxide combining with the alkali sodium silicate cause that to happen?
- A. Yes, when we would put them in the oven. I misunderstood you. When the CO₂ gas did affect them.
- Q. Mr. Johnson just reminds me that in asking you that question I am confining the period of time previous to your going to Shell in December of 1937.
 - A. Yes, I understand that.
- Q. Your previous answers, however, have been given with that point in mind? A. Yes.
- Q. To go back a minute, do you mean to tell me that during all your experiments with core oils from, let's say, the time you commenced work at Santa Fe Foundry, until you went to Shell, you never had any difficulty because of the fact that the cores were not sufficiently collapsible?
- A. I guess you didn't understand, or I didn't understand you.
 - Q. Probably not.
- A. We had trouble with friability until we used asphalt emulsion at the McCauley Foundry.
- Q. In other words, all of the cores made by you prior to the time you went to McCauley's were not quite perfect, to say the least, because they were not sufficiently collapsible?
 - A. That's right. [848]

- Q. Where did you get the idea of using an asphalt emulsion with your solution?
- A. Well, I tried everything. Dr. Cleveland of Philadelphia Quartz, is the one who gave me the first asphalt emulsion to try. He gave me a list of things, suggestions of many things to try.
 - Q. Do you recall when that was?
- A. That would be some three or four months before we took it to—before we were through at McCauley, anyway. I can't give you the exact date, but I went up to Philadelphia Quartz and I had seen Dr. Cleveland many times, and he asked me how I was coming along at the McCauley Foundry. Their places are right close. I told him I was having trouble with friability, and he suggested several things for me to try, and he said, "Today the Union Oil Company brought in some asphalt emulsion," and he said, "Why don't you take that along and try it?" And I said, "All right."

Mr. Hackley: Would you have him name the other things that were suggested by Dr. Cleveland?

Mr. Aurich: Q. Yes. If you care to, I have no objection, Mr. Ruddle.

The Witness: I think there is a list of them in that bag, there.

Mr. Hackley: It would save time and would complete that point.

Mr. Aurich: I was going to suggest, this thought occurred to me, the difficulties, if any, that you have encountered with your Core-Min-Oil in the making

of cores might perhaps be reflected in some of your notes. A. It is possible.

Q. Well, suppose that in that connection when you are looking through your notes tonight you look to see what you can find in that regard, and we can resume this line of examination tomorrow morning, when we can refer to the notes. [849]

If I understood your testimony correctly, you worked on your Core-Min-Oil problems approximately a year before you first discussed the matter with Shell in December of 1937; is that about right?

- A. That's right.
- Q. What else, if anything, were you doing during that period of time?
 - A. During that period of time?
 - Q. Yes.
- A. Well, I was in Mr. Peck's law office. I did some work in there with him. I did some work with Mr. Watson's solution that we were trying to promote.
- Q. Is there any difference between Mr. Watson's solution and your solution?
- A. Well, I don't know whether there is or not. The patent to Mr. Watson's solution don't mix them the same as I have had to mix it; I couldn't use it the way his patent calls for. I tried to make it from the patent.
- Q. Are the ingredients of your solution any different than the ingredients of Watson's patent?
 - A. No, they are the same.

- Q. His patents have issued, have they?
- A. Oh, yes.
- Q. In other words, long before you went to Shell a solution composed of sodium silicate, sodium fluosilicate, and aluminum sulfate was well known?
 - A. Yes.
- Q. Prior to your first visit with the Shell Company with respect to your Core-Min-Oil in December, 1937, you made attempts to cause other people in the manufacture and sale of your Core-Min-Oil to become interested?

 A. Yes, we did.
- Q. Will you name those individuals or corporations, please?
- A. Well, we went to American Bitumals Company, that's one, and American Brake Shoe Foundry is another. I think we also talked to General Petroleum Company. It is possible that we talked to Union Oil Company, too, because Mr. Austin, who was in the office, used to be with them and he wanted us to take it up with [850] the Union Oil Company. That is all I recall.
- Q. Did you ever endeavor to interest the Chrysler Company in the manufacture and sale of your Core-Min-Oil?
- A. No. I think the American Bitumals Company talked about doing that.
 - Q. By whom is Mr. Collier employed?
- A. Standard Oil Company. He is the president of the Standard Oil Company.

- Q. Did you ever attempt to interest the Standard Oil Company——
- A. Yes, Mr. Collier is the one who took us to American Bitumals Company.
- Q. Would you consider your negotiations, if we may call them that, with the Standard Oil Company, and with the American Bitumals Company, negotiations with one company, or would you consider them as two separate negotiations?
- A. No. I think that is one company. We went to Standard Oil Company, and they took it—that is, they are part of the oil company that manufactures the asphalt.
- Q. When did you go to American Bitumals Company?
- A. I would say probably two months or so before we went to Shell Oil Company.
- Q. That would be around October or November, 1937?
 - A. Yes, I would say that it was about that time.
- Q. Have you any notes concerning your visit to the American Bitumals Company?
- A. It is possible that there is something; I haven't looked for it.
- Q. About the date that you fixed, October or November, 1937, knowing that date, now will you look through the notes you have here?
- A. There wouldn't be anything in these notes. Maybe there are.

- Q. You have no notes other than those you have produced, have you?
- A. No, but there might be some letter from the American Bitumals [851] Company, or something.

Mr. Hackley: Letters and notes are not being confused, Mr. Aurich.

Mr. Aurich: Oh, no.

The Witness: Let's see if there isn't something where the American Bitumals Company even made some notes of their own here.

Mr. Aurish: Have you Defendants' Exhibit O, Mr. Ruddle?

- A. Yes.
- Q. Will you look under date of October 25, 1937?
- A. Yes, that's where Mr. Buckley, their chemist, came over to McCauley Foundry, that is October 25, 1937.
- Q. Was Mr. Buckley the man that you dealt with at American Bitumals?
 - A. No; he was their chemist.
- Q. Who was the man you dealt with at American Bitumals?
- A. I think his name was Fry. There is some of his writing, isn't that it, some place there where he compared the drying time of our stuff with Houghton Oil.
 - Q. Did you say his name was Fry, F-r-y-e?
 - A. I think it is F-r-y, but I am not sure now.
 - Q. Was he the man who was most familiar with

the negotiations between you and Mr. Peck and American Bitumals Company?

- A. No. Mr. Smith, the President of the Company, was the main man, and I have forgotten what the other fellow's name is there; he is assistant to Mr. Smith; I think he is a lame fellow, a big fellow.
- Q. Who did most of the discussions with regard to the work that you had done with your Core-Min-Oil?

 A. Mr. Fry and Mr. Buckley.
- Q. Did you enter into a contract with the American Bitumals Company?
 - A. They offered us a contract.
 - Q. It was not satisfactory to you?
- A. No. We quarreled about [852] the minimum that they were going to—we wanted them to sell it fast.
 - Q. Negotiations then broke off?
 - A. Yes. We sent their contract back to them.
 - Q. When was that?
- A. Well, it was just prior to our negotiations with the Shell Oil Company.
- Q. In other words, prior to your going to Shell you had severed your negotiations with the American Bitumals Company? A. Yes.
- Q. You also attempted to interest the American Brake Shoe & Foundry in Core-Min-Oil?
 - A. Yes.
 - Q. When was that?
- A. I think that was—that might have been between the time the American Bitumals Company

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
and going to Shell, it might be that we talked to the
American Brake Shoe Company.

Q. Was that definitely before you went to Shell?

A. Yes, because we didn't go to anybody after we went to the Shell Oil Company.

Mr. Aurich: Q. Who did most of the talking or observing the actual operation of your Core-Min-Oil at the foundry on behalf of the American Brake Shoe Foundry?

A. I don't think we ever took it to the foundry. [853]

Q. Did you ever get to the point where you were actually talking about a contract with them?

A. Yes. They asked for a contract.

Q. Did you submit one?

A. No, we never did.

Q. Why?

A. Well, we thought they weren't big enough to sell it all over the country.

Q. You had then definitely decided not to do business with the American Brake Shoe & Foundry prior to going to Shell?

A. Yes. We did not realize they were such a large company. We thought they were a small company, and we wanted to get a big output for this thing.

Q. My point is, before you went to Shell in December, 1937, you had definitely decided not to do business with the American Brake Shoe & Foundry Company, large or small?

- A. Yes, that's right.
- Q. How about General Petroleum, when did you go there?
- A. I can't give you the date of that, but it seems to me it was sometime during the time we were negotiating with the Standard Oil Company—what I am trying to recall, the head chemist came from Los Angeles that used to be in the Union Oil Company, with Mr. Austin, he came up, and Mr. Austin was anxious to have us deal with the General Petroleum Company.
 - Q. Who is Mr. Austin?
- A. He is an engineer that was in Mr. Peck's office part of the time.
 - Q. What sort of an engineer?
 - A. Well, he is an electrical engineer.
 - Q. What are his initials, please?
 - A. P. S. Austin.
 - Q. Is he still alive?
 - A. Yes; he lives in Berkeley.
- Q. I suppose he was acting at times as a technician for Mr. Peck in some of his litigation?
- A. No. He was trying to help sell Mr. Watson's patented solution that he had there. [854]
- Q. Did you negotiate with General Petroleum up to a point where a contract was talked about?
- A. No. This chemist said the General Petroleum of New York said they were going to develop a core oil of their own.
 - Q. It was prior to your negotiations with Shell?

- A. Yes, that's right.
- Q. How about the Union Oil Company?
- A. Well, the Union Oil Company, we started with the Shell and the same time we started with—then, about that time, we decided we would deal with no more than one person at a time, and we never negotiated any with the Union Oil Company.
- Q. You never talked about contract, or talked on the question of a contract with Union? A. No.
- Q. In the contract with Shell, which is here in evidence, there are three patent applications mentioned which have the following serial numbers: 165,765; 179,150; 184,237; two of those applications, at least, have issued into patents.
 - A. That's right.
- Q. Those two being patents No. 2,193,346, which is the patent that issued on serial application No. 179,150 to you, and the other one is patent No. 2,204,913, which issued on your application No. 165,765; is that right?

 A. That's right.
- Q. Has any patent issued to you or your assigns on the third application mentioned in the contract on application Serial No. 184,237?

 A. No.
- Q. Can you give me the exact time when you first disclosed to Shell your exact formula for making Core-Min-Oil?
 - A. Yes. It was the day the contract was signed.
- Q. The contract is dated April 8, 1938. Is that the date the contract was signed?

 A. Yes.

Q. Was this disclosure made by you to Shell before or after the [855] contract was signed?

A. After the contract was signed. We refused to give it until the contract was signed.

Q. To whom did you make such disclosure?

A. To Mr. Gratama, Mr. Zublin, Mr. McSwain, Mr. Waller, Mr. Spotswood. There was another chemist up there, a tall boy up at Martinez.

Q. Were all of these gentlemen present at the time you made your first disclosure?

A. No, I won't say—I don't think Mr. Zublin was up there, Mr. Gratama. I think I told them here in the Shell Building, and then we went to Martinez either that afternoon or the next afternoon and we made the solution up in their plant up there.

Q. Let's go back to see if we can reconstruct the scene, at least for my benefit. Where was the contract signed?

A. Signed in Mr. Peck's office, James F. Peck's office.

Q. Who was present?

A. Mr. James F. Pecck, Lydell Peck, Mr. Mc-Swain, Mr. Gratama, and myself, I think, was all. That is when we signed it.

Q. Prior to your signing of the contract had the contract been signed by any official or representative of the Shell Company?

A. I think Mr. Guepin had signed it first, and then I think Mr. Bradley, the Secretary. Mr. Peck Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) insisted that that resolution be attached to it, to the signatures.

- Q. What I am driving at, when Mr. McSwain and Mr. Gratama were at Mr. James F. Peck's office with you, Mr. James F. Peck, and Mr. Lydell Peck, and when they presented the contract to you, had it therefore been signed by Mr. Guepin and Mr. Bradley?
- A. As I recall it had been, but that is not positive.
 - Q. Then you and Mr. Peck signed?
 - A. Yes.
- Q. Mr. James F. Peck also signed some sort of a release?
- A. Yes, because I know when we signed it Gratama said, "Now, we will [856] hear what this mystery is," and we would not have told him after we signed it if the other names hadn't been on there, so I am safe in saying they signed it first.

Mr. Hackley: Note on the record that Mr. Gratama's signature appears as witness to Peck's signature on the contract.

Mr. Aurich: I don't know if that is a fact.

Mr. Hadley: It might be convenient to the Court in reading the record.

Mr. Aurich: Yes.

- Q. So immediately following that contract did you disclose to Mr. Gratama and Mr. McSwain the exact formula of your Core-Min-Oil?

 A. Yes.
 - Q. Was that disclosure orally or in writing?

- A. I wouldn't recall whether it was or not, whether I gave it to them orally and then wrote it down, or whether I gave it to them in writing; I wouldn't recall.
- Q. Will you now give me the exact formula of your Core-Min-Oil that you gave Mr. McSwain and Mr. Gratama at this meeting in Mr. James F. Peck's office on April 8, 1938?
- A. One gallon of water at about 100 degrees Fahrenheit, one ounce of aluminum sulfate, one ounce of sodium fluosilicate, and two gallons of sodium silicate 40 Baume.
 - Q. How about the asphalt emulsion?
- A. And that was mixed in the proportion of 5 to 8; 8 parts of what I just described to 5 parts of asphalt emulsion.
- Q. Then if I understand your testimony, you later went Martinez?
 - A. Went to Martinez.
 - Q. That same day?
- A. I can't recall whether it was that same day, but it seems to me we didn't go there immediately; whether we went the following day—— [857]
- Q. At Martinez who was present at that meeting?
- A. Mr. Spotswood, I believe a Mr. Snyder, and there is a chemist, a tall fellow that I can't recall his name.
 - Q. Was Mr. Zublin present?

- A. I don't recall whether Zublin went up with us that day or not.
 - Q. Was Mr. Waller present?
- A. Waller was present, and McSwain was present.
 - Q. Gratama present?
 - A. No, I don't think Gratama went up that day.
- Q. Prior to the time of this disclosure to Shell of the formula of your core oil, which was on April 8, 1938, following the signing of the contract, what had you told Shell was contained in your Core-Min-Oil?
- A. I possibly told them it was a sodium silicate solution; I didn't tell him what was in it. That was why it was—I know at one time I submitted a sample to them that had a red oil in it for another purpose—Yates is the tall fellow's name, if you want to have it—the red oil was used for another purpose, and Mr. Yates told me he tried to analyze it and was not successful.
- Q. What I am trying to drive at is, what did you tell Shell was contained in your Core-Min-Oil prior to the time of the disclosure that was made to them on April 8, 1938, after the signing of the contract?
 - A. I told them it was a secret formula.
- Q. You undoubtedly told them it contained sodium silicate? A. No doubt but what I did.
 - Q. Do you recall when you told them that your

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
Core-Min-Oil was a secret formula containing sodium silicate?

- A. I always told them that. I can't recall the date I told them first, but I explained to Mr. Mc-Swain that it was.
- Q. Why did you wait until April 8, 1938, after the signing of [858] the contract, before disclosing the composition of your Core-Min-Oil to Shell?
- A. Because we didn't want anybody to know what we used until we had made a contract with them, for fear of infringement.
- Q. As a matter of fact, your so-called Ruddle Solution was not a secret formula, at all, was it?
- A. Well, it is a little bit hard to put together; at least, I found it hard to put together.
- Q. That is the best answer you can give to that question? A. Yes, that's right.
- Q. Did you consider that the disclosure of the Core-Min-Oil in the percentages which you disclosed to Shell on April 8, 1938 constituted the optimum percentage for making the most satisfactory Core-Min-Oil?

 A. Yes.
 - Q. For all sizes of cores?
- A. No. As I explained this morning, for a different amount of sand and water—if you want to make the best core that we could make for hard castings to be made I would say that was the best formula that we were able to get together.
- Q. Well, what did you tell Mr. Gratama and Mr. McSwain at Mr. James F. Peck's office; did

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
you say "Here is my formula, it is good for some cores but not good for others."

- A. I said "This is the best we can do."
- Q. When did you first disclose to Shell the ratio of Core-Min-Oil to sand that should be used?
- A. Well, I think that was probably prior to the signing of the contract.
 - Q. Have you any idea of when that was?
- A. Well, I suppose when we [859] went to Macauley's Foundry, why, we mixed the sand with the solution and no doubt Mr. Waller took down all proportions. He was pretty good at that.
 - Q. Can you describe Mr. Waller for me?
- A. Yes. He is a tall fellow, about 6 feet tall; he is hard of hearing, and he wears a little electric vibrator.
- Q. What did you tell him about the ratio of Core-Min-Oil to sand that should be used?
 - A. As I recall, I gave him no proportions.
- Q. You didn't mention any proportion of Core-Min-Oil to sand? I am not speaking of the ingredients making up Core-Min-Oil. I am speaking of the proportions of Core-Min-Oil to sand, how much Core-Min-Oil did you use to sand?
- A. Well, we used about 1750 cubic centimeters of sand, and about 80 cubic centimeters of solution, and 50 cubic centimeters of asphalt emulsion.
- Q. Do you recall who was present when you made that disclosure?

- A. Well, I think I made it to everybody that I have mentioned.
 - Q. You mentioned it to Mr. Waller?
 - A. Mr. McSwain, and Mr. Spotswood.
 - Q. I am speaking of the first occasion.
 - A. Well, Mr. Spotswood was there the first time.
 - Q. At Macauley's? A. Yes.
 - Q. You are quite positive of that?
- A. Well, if he didn't get there the first day he was there the second day.
- Q. But I am talking about the first visit to Macauley's at the time you first disclosed the ratio, the percentage of Core-Min-Oil to sand that should be used, and we have here Mr. Waller, Mr. Mc-Swain, and you also mentioned Mr. Spotswood, and my question now is are you positive about Mr. Spotswood?
- A. No, I am not. My best recollection is he was there.
- Q. Did you know anything about Mr. Waller's background, his [860] previous experience in foundry matters before you went over to Macauley?
 - A. Only what he told me.
 - Q. What did he tell you?
 - A. That he had none.
- Q. Did he tell you whether he had ever been in a foundry before in his life?
- A. No. I understood him to say he never had been.

Mr. Hackley: This Mr. Waller is a Shell Oil employee?

A. Yes. He was an engineer, assistant at the time, I understood, to Mr. McSwain.

Mr. Aurich: Q. Did you consider that the proportion of Core-Min-Oil to sand that you have just mentioned and that you disclosed to Mr. Waller and Mr. McSwain over at Macauley's to be the optimum percentage to be used in making cores with your Core-Min-Oil?

- A. Yes, I would say that.
- Q. For all sizes of cores?

A. Yes, I would say they would work in all sizes.

Mr. Aurich: Q. I call your attention to your patent No. 2,193,346, which is one of the patents that issued in one of the applications referred to in the contract; I want to direct your attention to the formula for making core oil which appears in column 1 of the first page. I read:

"2 gallons water; 1-10 ounces aluminum sulfate; 1-10 ounces alkali fluosilicate, and 1-10 gallons of an aikali metal [861] silicate."

What was the 1-10 ounces of aluminum sulfate?

- A. I understand that it varies from 1 to 10.
- Q. In other words, you can use any variation between 1 to 10?

A. Well, I wouldn't say you could use—that was gotten out by a patent attorney. I wouldn't know his reasons for it.

Q. You don't know, then, what "1-10 ounces of aluminum sulfate" in your patent means?

A. No. I wouldn't know how to explain that. That was gotten out by a patent attorney.

Mr. Hackley: I might add, Mr. Aurich, that this case is not based on any patent infringement, and that that application was prosecuted by your client's Patent Department.

Mr. Aurich: Well, we will go into that a little bit more, then.

Q. Do you know who prepared the original patent application?

A. Yes. That was Mr. Roemer, in Townsend & Hackley's office.

Q. Did you sign this application for patent when it was prepared? A. Yes.

Q. Did you read it over? A. Yes.

Q. Did you understand what it meant at that time? A. I think so.

Q. Will you tell me now what it means?

A. Well, I understand that is a variation.

Q. I don't know what you mean by "variation." Does that mean you can use two gallons of water and 1-10 ounces of aluminum sulfate, or does it mean you can use 2 gallons of water and 1 or 10 ounces of aluminum?

A. No. It is somewhere between 1 to 10, as I understand it. The least you can use is an ounce, and the most you can use would be 10 ounces. As I understand it, that is what it means.

Q. The dash, in other words, indicates that rather than an alter-[862] nate, then, if you used more than 1 and less than 10 would you have to increase the percentage of any of the other ingredients, such as water, for example?

Mr. Hackley: I object to the interrogation of the witness on that until the patent has been offered in evidence, here. It is not a part of the record in this case.

A. Yes, I understand you would.

Q. What is the result of the formula in column 1, page 1 of your patent 2,193,346; is that what we have been designating as Ruddle Solution?

A. Yes.

Mr. Aurich: Q. Do you consider the percentage given in your patent at the place I have referred to to be the optimum percentage of upper and lower limits of the making of that solution?

A. Yes.

Q. How much water would you add to the solution if you added 10 ounces of aluminum sulfate and left the remaining proportions?

A. One ounce—such as one ounce of alkali fluo-silicate?

Q. To one gallon of alkali metal silicate.

A. I wouldn't be able to tell you that.

Q. That alkali metal silicate is sodium silicate, is that right? A. Yes, that's right.

Q. Does the 1-10 ounces of alkali fluosilicate

mean the same, in your opinion, as the 1-10 ounces of aluminum sulfate? A. Yes.

- Q. That is, it is an upper and lower limit?
- A. Yes.
- Q. You would not know if you varied the proportion of any of them [863] whether you would for the rest of them?
 - A. No, not without trying them.
- Q. How would the percentages of the formula for making your solution which appears at the place I have designated in your patent compare with the percentages of your solution that you disclosed to Shell on April 8, 1938?
- A. So far as I know it is about the same, only I picked out just what I had been doing.
- Q. You say "it is about the same." Is that not an exact formula within an upper and lower limit?
 - A. That is what I understood.
- Q. What limit did you use when you disclosed your formula to Shell, the upper, or the lower, or along in between?
- A. I don't know. I would have to study it to tell you, but it was in between; I would say it was in between, because I used one gallon to one ounce, and one ounce and two gallons.
- Q. In other words, you used two gallons of water in your disclosure to Shell?
- A. One gallon of water and two gallons of sodium silicate.
 - Q. An ounce of aluminum sulfate?

- A. Yes.
- Q. And one ounce of alkali fluosilicate?
- A. Yes.
- Q. Let's look at the formula appearing on the first column of page 2, which reads:
 - "1750 c.c. dry sand; 125 c.c. of a solution of approximately:
 - 2 gallons water,
 - 1-10 ounces aluminum sulfate,
 - 1-10 ounces alkali fluosilicate, and
 - 1-10 gallons of an alkali metal silicate
 - 40 c.c. of an asphalt emulsion;
 - 65 cc. of water."

Will you look at that, please?

I take it that where we find 1-10 appearing in that formula it means the same as it did in the formula in column 1, page 1? [864]

- A. That's right.
- Q. And the one is a lower limit, and ten is an upper limit? A. Yes.
- Q. What is the formula that appears in the first column of page 2 of that patent, is that your Core-Min-Oil? A. Yes, I would say so.
- Q. Are you able to tell me how the percentages of the various ingredients in the formula appearing in column 1 of page 2 of your patent No. 2,193,346 compare with the percentages of your formula that you disclosed to Shell on April 8, 1938?

 A. No, I wouldn't be able to tell you.

Mr. Hackley: I submit the patent speaks for itself. The calculation can be made.

Mr. Aurich: Q. Taking this formula appearing on page 2, the first column, and we will take 70 cubic centimeters of dry sand, 40 cubic centimeters an asphalt solution, 65 cubic centimeters of water; what would be the best variation in the remaining ingredients to get the optimum and best Core-Min-Oil?

- A. You want me to figure that out for you?
- Q. Do you have to figure it out, or can you tell me without figuring?
 - A. No, I would have to figure it out.
- Q. How much of a task is it for you to figure that out?
 - A. Well, it is a matter of proportions.
- Q. Well, if it will take you any length of time we will let it go.

Mr. Aurich: I will now ask to have marked for identification Patent No. 2,193,346, issued to Allan B. Ruddle, dated March 12, 1940, as Defendants' Exhibit S For Identification.

(The patent was marked "Defendants' Exhibit S For Identification.")

Mr. Aurich: Q. I want to go back for a moment to the dis- [865] closure that you made to Shell on April 8, 1938, after the signing of the contract when you disclosed the formula to Mr. Gratama and Mr. McSwain in Mr. James F. Peck's

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office. Did you tell them how the various ingredients
were to be mixed together?

- A. Yes, I think I did.
- Q. What did you tell them in that respect; first, as to how you made your solution.
- A. I don't recall whether I told them how we mixed them, but I think we decided to go to a foundry and actually do it; I think that is what was done.
- Q. Did you ever tell them exactly how you mixed your formula?
 - A. Mr. Gratama and Mr. Zublin?
 - Q. Anybody connected with Shell.
 - A. Yes.
 - Q. When was the first time?
- A. I think I told Mr. Zublin and Mr. Gratama and Mr. McSwain either that afternoon or the next afternoon.
 - Q. What did you tell them?
- A. I told them to take one gallon of water and in it put one ounce of aluminum sulfate, one ounce of sodium fluosilicate, and two gallons of sodium silicate.
 - Q. I don't want to confuse you.
 - A. Yes. Read that, please. (Answer read.)

Mr. Aurich: Q. Then what were they to do?

A. That was to be mixed with 8 parts of, that that I just gave you, with 5 parts of asphalt emulsion.

- Q. I don't want to interrupt you, but you are getting ahead of me. Did you tell them how they had to mix that solution in it?
 - A. Oh, yes, I did.
 - Q. What did you tell them about that?
- A. I told them they must have the water not more than 100 degrees Fahrenheit, and that the aluminum sulfate was to be stirred into the water thoroughly, then add sodium fluosilicate. Those two would be [866] stirred thoroughly together and then slowly add the sodium silicate.
- Q. How long was it to be stirred, if it was to be stirred after the addition of the sodium silicate?
- A. It should be stirred until it is thoroughly mixed; that takes four or five minutes, possibly, depending on what you have to stir it with.
- Q. Of course, prior to this disclosure the Shell Company had observed you making cores with your solution?
- A. Yes. They had never seen me make the solution up.
 - Q. They had seen you make the cores with it?
 - A. Yes.
- Q. They had observed the fact that you first poured your solution over the sand and mixed it with the sand, and then subsequently added the asphalt emulsion?
 - A. Yes, that's right; that's the way I made it.
 - Q. You have mentioned Mr. McSwain.
 - A. Yes.

- Q. You have known him for many, many years?
- A. I went to school with Mr. McSwain in Merced.
- Q. And up to the start of this controversy you were very good personal friends?
- A. Mr. McSwain worked for my father-in-law, who was a Civil Engineer for the Crocker-Huffman Land & Water Company, in Merced, for many years; in fact, he taught McSwain civil engineering.
- Q. That might be an answer to my question, but I am not quite sure of it. For years, and up, at least, to the start of this controversy between you and Shell, you and Mr. McSwain were very close personal friends?
 - A. We were; I always thought so.
- Q. And the friendship went back to high school days?
 - A. Yes, went back to high school days.
- Q. He is the Manager of the Asphalt Sales Department of Shell? [867]
 - A. Yes, that is what I understand.
- Q. He is the man you went to see in December, 1937, or early 1938, about your——
 - A. Yes, he is the one I talked to first.
 - Q. In connection with your Core-Min-Oil?
 - A. Yes.
- Q. Who was present when this meeting occurred with McSwain?
- A. I was with him alone. I think I met him on Market street, as I recall.

- Q. Is that where you had your conversation—
- A. I first told him about this, yes.
- Q. Please let me finish my question. We will have a rather bad looking record if you don't.
 - A. I am sorry.
- Q. In other words, your first conversation with Mr. McSwain regarding your Core-Min-Oil was when you met him on Market street?
- A. Yes, as I recall, that was the first time I had mentioned it to the Shell Oil Company, or to Mr. McSwain.
 - Q. What did you tell him at that time?
- A. I told him that I had discovered a method of making core oils for foundry work that involved the use of asphalt.
- Q. Go right ahead, I would like to have the entire conversation as clearly as you recall it. You, incidentally, might give me everything that Mr. McSwain said. I understand this is still at the meeting on Market street.
- A. Yes, that was the first time I met Mr. Mc-Swain where I talked to him about the core oil.

Mr. Hackley: Q. Was anybody else present? Mr. Aurich: He said no.

The Witness: No; I met him on Market street.

- Q. Is this the meeting that has also been referred to as the start of the negotiations, or was that a subsequent meeting at his office?
- A. As I recall it, that is the first time I mentioned core oil to Floyd McSwain, and he made the

remark that Shell was [868] always looking for an output for one of its products, and so I told him we had negotiated with the American Bitumals Company, and he wanted to know who it was I was dealing with there; I told him. I don't recall the man's name now; he knew him, he at one time worked for him. I said, "They want to give us a contract but they don't want to guarantee to take much of it," and he said, "Well, if it has merit, why," he said, "we will look into it, and if it has merit, why," he said, "we will be able to handle it." He asked me to come to his office and talk to him. He made the appointment, and I went to his office.

- Q. Is that the end of the first meeting on Market street?
- A. As I recall, that was about the sum and substance of the first meeting that I had with him.
- Q. You didn't tell him at that time any of the so-called advantages that you claimed for your Core-Min-Oil, did you?
- A. I don't think I did. I think I only told him it involved the use of asphalt.
- Q. Now, after that date when did you next see Mr. McSwain?
- A. I don't recall. I haven't any records to show the date when it was, but within the next day or two I went to his office, and I think Mr. Waller was there with him, and I am not sure whether Mr. Harsh was, too. Mr. Waller was there, I do recall.

- Q. Waller was present, and Harsch might have been?
- A. Yes; I told Mr. McSwain that we had been doing some work over at the Macauley Foundry, so he suggested that we get into the machine and ride over there and see it; so we did. I don't recall, my best recollection is that Mr. Spotswood came from Martinez and met us there.
- Q. Let's first confine ourselves to this first conversation at Mr. McSwain's office. Did you at that time tell Mr. McSwain of [869] what your Core-Min-Oil was composed?
 - A. I don't recall, but I am sure I didn't.
 - Q. You have no definite recollection on that?
 - A. No, I have no definite recollection.
 - Q. Other than it contained asphalt?
 - A. Yes, that it contained asphalt.
- Q. Did you tell him how it was to be marketed and sold?
- A. No, I told him we were looking for somebody to have market it and sell it for us.
- Q. Was Mr. McSwain interested in undertaking the marketing and selling of this Core-Min-Oil?
- A. He was extremely interested in seeing it there.
 - Q. What did Mr. Waller have to say?
- A. I don't think Mr. Waller had much to say there.
 - Q. Do you recall anything he said?
 - A. Not at that time, I don't.

- Q. Were you talking loud enough so that Mr. Waller could hear you?
- A. Oh, yes, I am sure he could hear us; this electrical contrivance, I am sure he could hear anything I had to say.
- Q. If Mr. Harsch was present, do you recall anything he said?
- A. No, I don't recall anything that was said at that time, other than we met over there, and we went over to Macauley's; that is about all I remember.
 - Q. That same afternoon?
 - A. I think that same afternoon.
- Q. I neglected to ask you what time of day was this meeting on Market street.
- A. I can't recall that. I remember coming from Oakland and walking up Market street. I overtook McSwain, or he overtook me, I guess it is more likely he overtook me, and we walked up Market street together.
 - Q. Was it forenoon or afternoon?
- A. I would say in the forenoon, but I am not positive. [870]
- Q. That would be the lower part of Market street? A. Yes.
- Q. McSwain was apparently on his way to his office? A. I should think so, yes.
- Q. You met him again by appointment at his office, and, according to your recollection, that same afternoon went over to Macauley's?

- A. Yes, Macauley's Foundry.
- Q. What time was the meeting?
- A. It is possible that we didn't go to Macauley's Foundry that afternoon, but the next morning, and we went over there because he wanted Mr. Spotswood to be present, and I remember we had a little trouble directing Spotswood to it.
- Q. Did he tell you why he wanted Spotswood present?
- A. No, he didn't. He said he wanted him to see it.
- Q. Did you make any inquiry as to why he wanted Spotswood present?
- A. He said Mr. Spotswood was one of his men in the Asphalt Department.
- Q. I am trying to get the entire conversation as near as you can now recall it, Mr. Ruddle.
 - A. Well, it has been three years ago.
 - Q. I appreciate that.
- A. I can't hope to carry all conversations in my head that long.
- Q. He didn't tell you any reason, then, why he wanted Spotswood present other than he worked for him?
- A. Well, he said he had a couple of men that worked for him, that he would to have see it.
- Q. Then either that afternoon or the next morning you went over to Macauley's? A. Yes.
 - Q. How did you go over to Macauley's?

- A. I went over with Mr. McSwain and Mr. Waller.
 - Q. Whose car?
 - A. In Mr. McSwain's car.
- Q. Will you tell me just what transpired at Macauley's at this [871] visit, just what was done by everybody, and what was said by everybody, as near as you can recall? I take it, without my repeating all the time, you have no notes of any of these conversations?
- A. No, I didn't keep any notes; I haven't any notes now, anyway. If I did keep them they are not available, I can't find them. Well, when we arrived at the Macauley Foundry I took Mr. Mc-Swain and Mr. Wallter and, I think, Mr. Spotswood back through the Macauley Foundry, back to where their head core-maker, Mr. Otto Gosh was, he was the core-maker who made the heads for the Hall-Scott motors. I introduced Mr. Waller and Mr. McSwain to Otto Gosh, and they talked to the core-maker for quite a little while.
 - Q. What did they talk about?
- A. They talked about the process that I had in the core business for making cores, and he offered to make up some of the cores, to bake them for them, and then he said he would have them poured that afternoon if they would like to see them. I showed them the way I mixed up the stuff that he made the cores of.

- Q. When you say "mixed up the stuff," what do you mean?
- A. I mean I mixed the core material into the sand so he could make cores out of it.
 - Q. Did you have some solution at Macauley's?
- A. Yes; I had been working there and I had a supply of solution over there in cans, and mixed the solution and the asphalt emulsion with the sand.
- Q. You mixed the solution and the asphalt emulsion and the sand for the core-maker?
- A. Yes. After I made it he made several things, I don't recall exactly what the different cores that he made were, but he made quite a few of them; I think he made one of those engine heads for them, as I recall, and I [872] think that afternoon they poured the casting for us and we went back the next day and looked at the casting.
- Q. Did Mr. Waller or Mr. McSwain make any statement at all while they were there?
- A. Yes, they were very liberal in their praise for what they had seen.
- Q. They thought they were seeing an excellent core when it was finished?
 - A. Yes, that is what they said.
- Q. Did they compare it with other cores that they had seen before?
- A. Well, they did with Macauley's cores. I don't know what they had seen in the way of cores before, but they were there and they talked to Mr. Olson and to this Otto Gosh, and Otto Gosh explained to

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them about the drying time, and the saving of oil
in their furnace fuel.

- Q. Did they use oil-burning ovens at Macauley's?

 A. Yes, they have gas, I think it is.
- Q. Did anybody make any inquiry as to why cores were made, or how were cores made?
- A. Yes, I am sure; they were there for hours talking about every phase of the core-making business.
- Q. Did you have much to say on the occasion of that visit? A. Yes, I did.
- Q. Do you recall some of the statements that you made?
 - A. I explained to them what it was all about.
- Q. Well, instead of telling me you explained to them what it was all about, I would like to have you tell me at least in substance what you told them.
- A. Well, I told them, I took some of the sand and demonstrated to them how it was used in manufacturing of cores, and about the saving in drying time, and the elimination of many of the ingredients that were necessary to put in the ordinary core oil, such as wiring, and vents, and they used to put in tux that they had to put in to hold it up; many [873] ingredients that went into the ordinary core were eliminated, and one of the most important things I told them is that it is porous, so the gases pass through it, and that eliminates the bubbles that come in the castings.

- Q. Did they agree your core oil had these so-called advantages?
- A. Yes, they did agree to that. Then I suggested that we try this out under their supervision.
 - Q. This was still at Macauley's? A. Yes.
 - Q. You suggested that?
- A. Yes; so it was agreed by all of us that we would go to the Vulcan Foundry.
- Q. Who suggested going to the Vulcan Foundry?
- A. I don't recall whether McSwain or whether Lydell Peck did.
- Q. Was Mr. Peck along on this visit to Macauley's?
- A. I don't recall whether he went on that trip or not, he did go with us many times, but, as I recall, he didn't go on that first trip.
- Q. Well, was it the occasion of your first visit to Macauley's they said, "It looks very fine to us, we would like to play with this thing a while, let's take it to Vulcan"?
- A. I may be mistaken about that, but I know that the first meeting with them somebody suggested that we take it to Vulcan.
 - Q. You don't know now who that was?
- A. No, I don't recall. The reason I am a little bit indefinite about it was because Lydell Peck was a friend of Harold Martin, who runs the Vulcan Foundry. It might be he is the one who made the suggestion.

- Q. At the first visit to Macauley's you say you went back the next day to see the results of the pouring?
- A. Yes, as I recall, we went back to see the castings of those pourings.
- Q. Did they express some admiration of the fine shape the cast was in?
- A. Yes; the foundrymen told them how fine those castings were. [874]
 - Q. Then did you return to the City?
- A. Yes; I went over with, I believe, McSwain in his car together with Waller, I think, at that time, and maybe Mr. Peck was along then, I don't know.
 - Q. Then you all came back to the City?
 - A. Yes.
 - Q. Did you go to Mr. McSwain's office?
- A. I doubt it. I think probably we went to Mr. Peck's office.
 - Q. Mr. Peck with you?
 - A. No, I think we probably separated.
- Q. This would be, roughly, not more than three or four days after your visit with Mr. McSwain in his office?
 - A. Well, it would be within that time, I think.
- Q. Did you have another visit with Mr. Mc-Swain in his office subsequently?
- A. Well, I went to Mr. McSwain's office every few days, every day or two for a long period of time.

- Q. That was before you went to Vulcan, or after you went to Vulcan?
- A. No, from the time we started for Vulcan; he had Mr. Waller go with us to Vulcan.
- Q. I am trying to get the period of time before you went to Vulcan right now.
- A. Well, we made an arrangement to go to the Vulcan Foundry, I cannot remember just how long after that was, but we were all anxious to get the thing tried out, and Mr. McSwain went, too.
- Q. So we have a clear understanding of it, then, is it correct that within three or four days after your first visit with Mr. McSwain in his office you then went to the Vulcan Foundry to continue the experiments and arrangements were being made to go to work at Vulcan, or was additional work done at Macauley's before you went to Vulcan?
- A. No. We went that first visit and the second visit we went to view the castings. I am sure we went into Macauley's and nothing more was done as Macauley's, and then we went to the Vulcan Foundry. [875]
- Q. Can you tell me when you started work at the Vulcan Foundry?
- A. I would say within the next week after we were over there, probably ten days; I don't know just exactly the way it was, but it was as soon as we could all get together and go over there and make arrangements for the Vulcan Foundry.

- Q. You say a week or ten days from what period of time?
- A. From the time we first went to the Macauley Foundry.
- Q. That would be, roughly, two weeks after your first visit to Mr. McSwain's office?
 - A. Well, I am only guessing at that.
- Q. I appreciate that. During that two-week period, or ten-day period, between the time you left Macauley's after the pouring of this casting and the time you commenced work at the Vulcan, did you visit Mr. McSwain at his office?
- A. Well, it just occurred to me that we went up to Martinez after we went to the Macauley Foundry. I went up with Mr. McSwain first, up to Martinez, to meet Mr. Spotswood up there, and Spotswood did some work up there for a few days before we went down to Vulcan, I think. This is all just to my best recollection.
 - Q. You are not very sure of that, are you?
- A. No, I am not. I know I went up and turned over the information how to use it, that was up in Martinez, and I had to go back up and show them, they couldn't make the solution.
- Q. Well, you had not told them how to make the solution up to this time, had you?
- A. Yes, I did. I told them how to make the solution after we went over to Macauley's, the Shell Company; I think the next day we went to Martinez, and I told them how to make the solution.

Mr. Hackley: Do I understand the next day was the day after making the contract on April 8th?

The Witness: Yes, that was after that. [876]

Mr. Aurich: I think perhaps we are getting a little confused now in that period of time.

The Witness: Yes.

Mr. Aurich: Let us now go back again and see if we can reconstruct the scene. You met Mr. McSwain on Market street, had a conversation with him, went to his office probably the next day or so, had another conversation with Mr. McSwain and Mr. Waller, then either that afternoon, or the next morning, you and Mr. Waller and Mr. McSwain went to the Macauley Foundry, some cores were made, and the next morning you went back to see the results of that core in its casting shape.

A. Yes.

- Q. Then somebody decided that further work should be done at the Vulcan Foundry, and it was about ten days from that time before you commenced work at Vulcan. Am I right up to that point?
 - A. Yes, you are right.
- Q. In that ten-day interval, is it your testimony that you went to Martinez?
- A. Well, it occurs to me that we did go up to Martinez.
 - Q. To help Spotswood?
- A. To see Mr. Spotswood and familiarize Mr. Spotswood with how to manufacture the cores.

- Q. What do you mean, "how to manufacture the cores"?
- A. Well, he was going to do some work at the Vulcan Foundry, and it was necessary for him to know how to make cores, and so I took some equipment that I had at my house and we went up there to Martinez.
- Q. Was he unfamiliar with the art of core-making, as you understood it?
- A. That is what he told me at the time, so I—it was a doughnut affair that I had to make cores, I took it up there, some kind of a gelatin mold of some kind that I had; I went up there and we made some cores up at Martinez. [877]
- Q. If you did make any visit to Martinez between the time you left Macauley's and went to Vulcan it was not for the purpose of showing them how to mix the solution, but it was to educate them in the art of making cores?
- A. Yes. I didn't mean to mix the solution, I meant to mix the solution with the sand to make molds.
- Q. Up to this time, certainly, the Shell Company had not been told what was in your solution?
- A. No, I didn't mean that. I meant to put the sand and the emulsion and the solution together in the sand.
- Q. And also to educate Mr. Spotswood in the art of core-making? A. Yes.
 - Q. Outside of your visit to Martinez and be-

tween the time of leaving Macauley's and commencing at Vulcan, did you have any visits with Mr. McSwain in his office?

- A. Yes, I would say I was visiting Mr. McSwain practically every day.
- Q. You are confining yourself now to that, let's say, ten-day period, and I am not going to ask you to confine yourself to any one conversation, but can you tell me what was said at all, or some, of those conversations; I don't care whether the first or the last.

 A. I couldn't remember it.
- Q. Were you trying to sell Mr. McSwain on the idea of undertaking the manufacture and sale of your Core-Min-Oil?
- A. Yes, but he didn't need very much selling, he became very enthusiastic about the idea, himself.
- Q. Did you at any time during that period make any representations to Mr. McSwain relative to the alleged advantages of your Core-Min-Oil as compared with other core oils then on the market?
 - A. Yes, undoubtedly I did.
- Q. What other core oils or core oil did you compare to your Core- [878] Min-Oil?
- A. Well, there was one oil called Linoil, one was Houghton oil, Quandt oil, and Linseed oil, of course. I think that is practically all the leading oils.
- Q. Those were the oils in general that you were comparing with your Core-Min-Oil? A. Yes.
 - Q. And pointing out to Mr. McSwain the ad-

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
vantages you claimed for your product over those
core oils?

A. Yes.

- Q. Is that right? A. That's right.
- Q. Did you tell Mr. McSwain that in using your Core-Min-Oil the fuel costs would be greatly reduced and the amount saved would pay for the cost of the Core-Min-Oil?
- A. I don't recall that statement, but I might have.
- Q. Can you at this time recall any specific statement that Mr. McSwain made to you in connection with your Core-Min-Oil between, let's take the time of your first visit, and the time of your going to Vulcan; do you recall any specific statement he made at all?
- A. I can remember one very distinctly; we were talking about, I wish I could think of the man's name in the Standard, Mac something, that Mc-Swain worked for, we were talking about a contract with the Standard Oil Company, and Mc-Swain made the remark that the Shell people were the boys who really sold things, that they had salesmen and when they took hold of something to sell they really sold it.
- Q. That is the only remark along that nature you can recall at this time that Mr. McSwain made during the period in question?
- A. Oh, I could probably think of many remarks similar to that.

- Q. Well, I would like to have your answer, please.
- A. He also made a statement they had five thonusand salesmen, and that every district would be called on at least once a month. [879] I remember him making that statement.
- Q. I want all remarks you remember, Mr. Ruddle.
- A. And he said, "What we want to have is a background; if we can get a background of this thing where we can really sell it," he says, "we can sell it and possibly take the bigger part of the market."
- Q. Did he express any trepidation about the fact that the Shell Company was entering into an entirely new field, namely, the core oil field?
- A. Well, he said in that connection that they called on foundries, anyway, because they sold them a lot of lubricating oil, things of that kind, so it wouldn't be out of their line of trade entirely.
- Q. He did tell you the Shell Company had never engaged in core oils?
- A. Yes, he said they never had gone into that, the use of core oils.
- Q. Can you remember any other remark that Mr. McSwain may have made during this time of your first visit with him?
- A. I don't recall at this present minute, but if I could think about it a little bit I probably would think of some things.

- Q. Did you ever give Mr. McSwain a list of claimed advantages of Core-Min-Oil?
 - A. No doubt; no doubt I did.
- Q. Would you recognize such a document if we should show it to you? A. Possibly.

The Witness: Yes, I think many things like that were given to Mr. McSwain, during some period. We were trying to work togeth- [880] er and make up all the data for sale, and we furnished everything that we could think of in the way of advantages.

Mr. Aurich: Q. You say "we" in your last answer; you mean you and Mr. Peck?

A. Yes, Lydell Peck and myself. Lydell Peck, and myself, however, at the Vulcan Foundry—I mean the Macauley Foundry, and Harold Martin, who is the head of the foundry there, he gave us a lot of information as to what was necessary for cores, and we tried to compile all kinds of information for sale purposes.

Mr. Aurich: I will now ask that the document identified by the witness by marked Defendants' Exhibit T For Identification.

(The document was marked "Defendants' Exhibit T For Identification.")

Mr. Aurich: Q. Do you know who prepared the document, Defendants' Exhibit T For Identification? A. No, I don't.

Q. Do you recognize any of the language in there as your language?

- A. No, it is not mine, I am sure, but it was probably done in Mr. Peck's office; probably Lydell Peck did it. I wouldn't be sure, though.
- Q. By the way, during all conversations you have had with Mr. McSwain that you have told us about up to the present time, at least, you have not mentioned anything about you telling him what state your Core-Min-Oil was in. Did you tell him it was all ready for the market, or what did you tell him about that?
- A. Well, I demonstrated to him the status of the material.
- Q. You didn't tell him anything about the difficulties you were having of the softening of the cores?
- A. Yes. He was told everything in the world about it, everything we knew about it.
- Q. Well, you see, that is what I am trying to get at. I want you [881] to tell me what you told him. What did you tell him about the difficulties you were having?
- A. We told him we were having trouble with cores getting soft, we didn't know it was caused from the gas.
- Q. Did you tell him any other difficulties that you were having?
- A. Yes, we told him that we had to keep it in closed containers under wet sacks.
 - Q. Anything else?
 - A. Well, I think that was probably all.

- Q. In other words, you told Mr. McSwain that you had a core oil that, in your opinion, was far superior to anything on the market, but that you were having a little trouble, such as softening of the cores on occasion, and the fast-drying of the sand on the bench when it was kept in air-tight containers, or wet sacks; is that about right?
 - A. That's right.
- Q. Did Mr. McSwain know what you were talking about when you said "softening of the cores"?
- A. Yes, I demonstrated it to him when some of the cores would get soft.

Mr. Aurich: This evening, in addition to the other things I have asked you to do, Mr. Ruddle, I wish you would please give some consideration and thought to your conversations with Mr. Mc-Swain, because I am quite satisfied that if you gave the matter a little more thought you might be able to think of many more things that were said by him and by you, and if you can do that, please, I will probably resume tomorrow morning asking questions about it. In that connection I would prefer you not to read Mr. McSwain's deposition; however, I have no means of preventing you.

Mr. Hackley: Well, I can tell you I will not give the deposition to Mr. Ruddle, and I know he won't ask for it.

Mr. Aurich: That applies to Mr. Waller and Mr. Harsch. [882]

Mr. Hackley: You don't mind his refreshing

his recollection from any notes he may have made contemporaneously or even subsequently? I know Mr. Ruddle has some memoranda which were not made contemporaneously with the events, but sometime afterward, which may help him.

Mr. Aurich: If they do and he will produce them I will be glad to have him refresh his recollection from any of them.

Mr. Hackley: I think I have some such notes in my file. I will say he copied the notes on the basis of his recollection and if you would like him first to give what he can from memory and then to use such notes, whenever they were made, that he may do so——

Mr. Aurich: That will apply to both the notes and the other——

Mr. Hackley: There are some such notes, aren't there, Mr. Ruddle?

A. Well, I think it is just typewritten, the notes. I sat down and wrote this as I remembered it and then had it typed, and I think I have thrown—I gave you a copy of it, I think, at the time.

Mr. Hackley: I think I have such a memorandum in my files. You can identify its history for Mr. Aurich when you produce it.

Mr. Aurich: Well, my only point, I just want you to refresh your recollection, because you said you could probably think of other things if you thought of it. I want you to think of it, because I want you to state your recollection on the subject

if you can. That applies, of course, to Mr. Waller, and Mr. Harsch, and Mr. Spotswood, and all other Shell representatives. I make that statement because I appreciate it is a long time to remember conversations, so if you will do that without referring to the previous depositions of the defendants' witnesses [883] we will appreciate it. [884]

Mr. Aurich: I want to clear up one very slight ambiguity in yesterday's testimony, Mr. Ruddle. At the time that the contract was signed by you and Mr. Lydell Peck at the meeting that was had in your office, or Mr. Peck's office, I should say, when you and Mr. Lydell Peck, Mr. James F. Peck, Mr. McSwain and Mr. Gratama were present, you mentioned something about Mr. Peck insisting that the resolution be attached to the contract; do you recall that?

A. Yes.

Q. That was Mr. James F. Peck's request, was t? A. Yes.

Mr. Hackley: Mr. Aurich, before we go into the full testimony this morning I want to make a statement for your guidance on the record. You will recall that yesterday afternoon Mr. Ruddle was called upon to testify as to all he might then recollect of various conversations with Mr. McSwain, of the Shell Oil Company, and he gave the substance of some of the conversations, and then you asked him to consider the matter further last night. At that time I indicated, I believe, on the record that I had some notes which had been given to me, but

these books or notes were not contemporaneously prepared with the occurrence of the events covering some phases of those conversations that I proposed to locate and give them to Mr. Ruddle to refresh his viewpoint. That at the time seemed to be a satisfactory process so far as you were concerned, and then you will recall that after I had returned to my office last night you telephoned [885] me and asked me not to refresh Mr. Ruddle's recollection at that time through those notes, perhaps to have them available and let them be used later, but not to do that, not to use them. Mr. Ruddle had left my office at the time, so I had not, and at that time had not given him any notes, nor had I even looked for them. We had arranged to meet this morning for that purpose. I attempted to get Mr. Ruddle and caution him on that, but was not able to reach him. I find he did locate and identify the same set of notes, and Mr. Ruddle tells me he did read them over during the evening. I am sorry that occurred, because we would have liked to comply with your thought, but I think Mr. Ruddle will tell you they added nothing to his recollection of yesterday.

Mr. Aurich: Q. When were these notes Mr. Hackley has been referring to made, Mr. Ruddle?

A. Well, I haven't seen the date, I don't think the memorandum is even dated, but it was after the reports, all the reports had been sent on the work of the Shell Oil Company.

Q. Was it before or after the cancellation of the contract by Shell?

Mr. Hackley: The alleged cancellation.

Mr. Aurich: If you prefer it that way.

The Witness: Yes, it was after.

Mr. Hackley: I don't wish any construction that might be an admission to be——

Mr. Aurich: I don't mean to use it that way, asking Mr. Ruddle to acquiesce in anything contrary to his position, of course.

Mr. Hackley: We can have that understanding, then.

Mr. Aurich: Certainly. [886]

Mr. Aurich: Certainly.

Mr. Hackley: You may speak as you will.

Mr. Aurich: Q. Did you bring a copy of those notes with you?

A. I gave them to Mr. Hackley.

Mr. Aurich: May we see them?

Mr. Hackley: Yes; I see no reason why you shouldn't be shown these notes. Mr. Ruddle tells me, and I will ask him, these notes apparently were prepared between the time the purported notice of cancellation was received and the time this action was filed

A. Yes, that's right.

Mr. Hackley: The chronology of the notes would indicate that.

Mr. Aurich: Well, we will go into it later. If

you will just leave it here I won't keep it during the noon recess, but I am going to——

Mr. Hackley: Well, I will have it marked as Plaintiffs' Exhibit next in order for Identification.

(The document was marked "Plaintiffs' Exhibit No. 1 for Identification, on Deposition of Allan B. Ruddle.")

Mr. Aurich: Q. During the course of the evening, Mr. Ruddle, did you have an opportunity to go through your note books and refresh your recollection on the work that you did at the McCauley Foundry?

- A. Well, you asked me to look and see if there was anything pertaining to the Enterprise Foundry, and the Kingwell Foundry.
 - Q. What about McCauley?
- A. I didn't understand that, but these books do contain work done at the McCauley Foundry.
- Q. Do they contain notes of work done by you at the Enterprise Foundry?
- A. No. I just found a notation of the date of the Enterprise Foundry. [887]
- Q. Do they contain any notations of work done by you at the Kingwell Foundry?
- A. Yes, I do find a little something here; it isn't dated.
 - Q. May I see it? A. But that is it.
- Mr. Hackley: Would you identify the book you are looking at?

The Witness: The book you have handed me is Defendants' Exhibit P for Identification.

Mr. Aurich: Q. You have three sheets pinned together. Do all three sheets refer to the work?

A. Yes.

Mr. Aurich: Q. In this book which you have handed me, Defendants' Exhibit P for Identification, you have designated three pages which refer to your work at the Kingwell Foundry. Will you read into the record what you find on those three pages, please?

A. It is headed "Core Oil. Test run at Kingwell Bros. Brass Foundry, 444 Natoma Street, San Francisco. Made Solution No. 11 and took it to the Foundry. Made core (circular made in two halves) stuck together with flour paste. Ran casting. Our core was used on inside, turned out all right. Used 16 parts sand 1 part solution 32 degrees." I suppose it is Baume.

Q. Let me interrupt. I don't want you to interpolate. I just want you to read that into the record.

Mr. Hackley: Let him read it and give it to the Reporter [888] to copy it verbatim into the record.

The Witness: This is the second page: "Kingwell Foundry. Used No. 11 solution 32 degrees Baume mixed with 20 per cent. Shell red oil 200 viscosity, 16 parts sand dry 1 part solution 32 degrees No. 11. Poured a casting of bronze. Mr.

Scott reported it was best casting he had ever seen poured."

I think there is another page here:

"Solution 32 degrees No. 11 was used in core mill, core came out as smooth as glass. Also some solution with 20 per cent. oil were used. Earl Friend said he thought the latter was a little brittle."

That's all.

Mr. Aurich: Q. What do you mean in your notes when you say "Made Solution No. 11 and took it to the Foundry"?

- A. Well, it means I made up that solution and I couldn't tell you now what was in No. 11. That was one of the tests I was running.
- Q. Was that a system that you developed for numbering your solutions? A. Yes, it was.
- Q. A few pages before the pages in Defendants' Exhibit P which you just read into the record I find a notation reading: "No. 11 Core Oil 6/1/37." Is that the Solution No. 11 that you referred to in your work at the foundry you just mentioned?
- A. I would think that it is, but I wouldn't be positive about it.
- Q. Will you read that Solution No. 11 into the record, please?
- A. It is headed "Core Oil 6/1/37. No. 11. 715 Leavenworth Street, San Francisco, California. 100 cubic centimeters of red oil, Shell, 200 viscosity; 5 cubic centimeters Oleic acid, 1 cubic centimeter Trietheoloimine. Stir with egg beater thoroughly

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
and add 100 cubic centimeters solution 30 degrees,
stir with stick until thoroughly mixed, Del Monte
sand medium.'' [889]

Q. If that formula, or Solution No. 11, is the same formula that you referred to in your work at Kingwell Foundry, where you say, "Used Solution No. 11," it made a fairly good core and certainly a good casting; is that right?

A. Well, it says there that it made a good casting, but that is not—that is only one of many that I tried at the Kingwell Foundry.

Q. I see, in other words, it made a good core and, according to your notes, a good casting, but, nevertheless, other cores and other castings made of the same material were not so good?

A. The friability on this particular one was not good.

- Q. The friability was not too good?
- A. No, it was not good.
- Q. Do you find that set forth in your notes?
- A. No. That is just my recollection of it.
- Q. I want to discuss your work at the McCauley Foundry in some detail, all of the features, prior to the time that you went to Shell in December, 1937. or January, 1938, and I want you to refer to your books whenever you deem it necessary to answer these questions, if you will. What material did you commence to work with at the McCauley Foundry when you first went there?
 - A. I was using a solution that I made, as I re-

call, 32 Baume solution, as I described yesterday, together with a red oil and a pale oil. I think they were the first that I used in the McCauley Foundry.

- Q. Those were the same ingredients that you had used in your core oil at the Santa Fe Foundry? A. Yes.
- Q. Did you make any variations in percentages of the ingredients used in that core oil at McCauley other than used by you at Kingwell?
- A. Yes, I did. I made every variation that I could think of.
- Q. For how long a period of time did you use this core oil, con- [890] sisting of the red oil that you spoke of?
- A. Well, I would say about five or six months while I was there; or five months, possibly.
 - Q. What were the results?
 - A. Well, the friability was not good.
 - Q. On any of them?
- A. No, it was not sufficiently good on any of them.
 - Q. Any other difficulties?
- A. Yes. I had the same difficulty of the drying on the bench when it was not covered; sticking to the box was another difficulty that we had.
- Q. What did you do to overcome those difficulties, if anything?
- A. Well, the core-makers there used several powders that they had there, and one method was, especially, to use a very fine dry sand dust that they put around the box, dusted the boxes.

- Q. That would eliminate the sticking on the box? A. Yes.
- Q. But it wouldn't eliminate the fast-drying on the bench, would it?
- A. No; we had to cover it with either wet sacks or some enclosed container.
- Q. When did you commence to use asphalt emulsion in your core oil?
- A. I don't remember what date that was. I fixed it, in my mind as about three months before we went to Shell Oil Company.
- Q. Is there anything in your notes that would show when you first used the asphalt emulsion?
- A. No, I didn't find anything in my notes. I found where we did use it but I didn't find where it said it was the first I had used.
- Q. That probably makes it around September or October, 1937?

 A. Yes, that is possibly it.
- Q. When you first started to use the asphalt emulsion in your core oil——
 - A. That would be about the date, I think. [891]
- Q. When did you go to see Doctor Cleveland, of Philadelphia Quartz Company?
- A. Well, I had been to see Doctor Cleveland several times during the time I was there at the Macauley Foundry.
- Q. At what time did Doctor Cleveland suggest to you that you might try asphalt emulsion with your solution, to see what the results would be?
 - A. Well, I went over to Doctor Cleveland's

office at the Philadelphia Quartz one day, and he had suggested many things that I tried, and one day when I was there he said, "The Union Oil Company just brought me in a can of asphalt emulsion"; he says, "Why don't you take that and try it?" So I said, "All right, I will."

- Q. Do you recall when that was approximately?
- A. Just about the date that I gave you there.
- Q. About September or October, 1937?
- A. Yes. I would think it was about that date.
- Q. I may be mistaken, Mr. Ruddle, I was under the impression that you had previously testified that you had completed the development of your core oil about the middle of 1937.

Mr. Hackley: What sort of a record do you have before you?

Mr. Aurich: I am referring to page 5 of Mr. Ruddle's testimony. Is that testimony by you in error?

- A. Yes, it must have been later than that.
- Q. It was later than the middle of 1937——
- A. Yes.
- Q. Then, when had you completed the development of your Core-Min-Oil?
- A. Yes. I think it was possibly September, or October, possibly, 1937.

Mr. Hackley: I might point out, Mr. Aurich, as you no doubt noted on the record. at page 5 the witness said "Maybe the middle of 1937."

Mr. Aurich: That's all right. I am merely try-

ing to get [892] whatever date he has in mind. I certainly don't know what date it was.

Mr. Hackley: In other words, he wasn't very definite at that time.

Mr. Aurich: Q. You can't give me any more definite date now of the time when you completed your development of Core-Min-Oil other than sometime in 1937, probably the latter half?

A. Well, it would be in the latter part of 1937; September or October would be my estimate.

Q. How long after Doctor Cleveland suggested that you might try the asphalt emulsion was it before you completed the development of your core oil?

A. I worked upon it quite a little while after that.

Q. "Quite a little while" is rather indefinite.

A. Well, I won't attempt to fix the length of time that I worked on it before I took it—I made a great many tests on it, and many variations of tests, but I couldn't recall just when, because I have no record on it that I can find.

Q. Would you say that it was probably the latter part of October, 1937, before you received the idea of using asphalt emulsion in your Core-Min-Oil from Doctor Cleveland?

A. No, I wouldn't say that.

Q. You think it was earlier than that?

A. Yes, I would think it would be earlier than that.

- Q. Would you say that you experimented with asphalt emulsion and your so-called Ruddle Solution for a period of a month after you received this information from Doctor Cleveland before you had it perfected?
- A. Well, I would say possibly, though I am not positive about it.
- Q. I am not trying to pin you down to a definite date if you [893] cannot give me one. I am merely trying to get an approximation of time.

In working on this Core-Min-Oil with this socalled Ruddle Solution and asphalt emulsion, as suggested by Doctor Cleveland, you used the Union Oil emulsion?

- A. Yes, that was the first that I used.
- Q. Did you use any other type of emulsion?
- A. Yes, I used the Standard Oil Company—American Bitumals emulsion.
 - Q. Any other?
- A. No, I think that is all, but the Standard Oil Company brought four different emulsions for me to try.
 - Q. Were they all satisfactory?
- A. Well, so far as I could tell they were about the same.
- Q. You didn't notice any difference in results because of the use of one type of asphalt emulsion rather than any other?
- A. Yes. I think one was a little stickier; I don't remember, I can't even recall which—they used

initials, one was AP, I remember that, but I don't recall now them by the number. There was a difference, and you could tell it in the odor that they had.

- Q. How long did you experiment with the Union Oil emulsion before you went to the Standard Oil emulsion?
- A. Well, I would guess a month, but that is just hazy in my mind now.
- Q. In making these cores with different asphalt emulsions and the so-called Ruddle Solution, where did you keep the materials, did you keep them at home, or were they kept in the foundry, or where?
- A. No; they were kept at the foundry. I had them at home, too. I worked all the time at home on it.
- Q. How did the percentage of each of your materials that you used at the McCauley Foundry vary from the time you commenced to use the asphalt emulsion together with your Ruddle Solution? [894] A. How did they what?
 - Q. Did you immediately hit upon the-
 - A. Oh, no, I didn't.
- Q. (Continuing) ——happy solution of the percentages you gave us yesterday?
- A. No. We tried out proportions that we could think of, every proportion we could think of.
- Q. Can you give me some of the proportions that you tried that you can think of at the present time?
- Λ. No, but we did use enough of the solution; that is, a greater amount of solution than asphalt

emulsion, so the friability wouldn't be good. Then we started the other way until the strength was not enough.

- Q. And then stopped when you got—
- A. When we hit on that particular formula that I gave you it seemed the best for both strength and friability.
- Q. How would you determine when you had reached the optimum friability?
 - A. We tried them in castings.
 - Q. In actual commercial practice?
- A. Yes. It was in the foundry, they poured a casting for me almost every day at the McCauley Foundry.
- Q. How would you determine when you had reached the optimum of strength?
- A. They would take a casting after it had been poured and tap it with a hammer, and the sand is supposed to pour out. That is for friability and for strength, if it makes a perfect casting.
 - Q. Did it always pour out freely?
- A. No. We had many of them, we had many that we had too much solution and not enough—it didn't pour out.
- Q. When you reached the optimum it did always pour out freely?
- A. Yes. The friability was—the formula there said the friability was all right.
- Q. When you reached the optimum formula was the strength satisfac-[895] tory?

- A. Yes, they said it was all right. The only trouble there, we had trouble with cores getting soft because of the gas, but where the cores were not affected by gas they pronounced the cores all right.
- Q. By the way, did the McCauley Foundry ever use your core oil commercially? A. No.
- Q. In mixing this Core-Min-Oil with the sand how would you go about it?
 - A. At the McCauley Foundry?
 - Q. Yes.
- A. We mixed it by hand generally by putting a measured amount of sand on a bench and then put the solution in first, and then the asphalt emulsion in last, and then mixed it with your hands by rubbing it together.
 - Q. And immediately placed it in the core box?
- A. I would make it up for the core-maker and when he was busy on the Hall-Scott motor heads; he would make it and go away, some of those stood there a long time before he made it, as much as an hour, before he made it. If he wasn't there to make it then I would put a wet sack over it and he may make it sometime during the afternoon.
- Q. In other words, if he wasn't there to use it fairly soon you covered it with a wet sack?
 - A. Yes.
- Q. And was it the practice at the McCauley Foundry to keep their core sands covered with wet sacks?

 A. Yes, they did that.

- Q. Did they keep them in air-tight containers?
- A. No, they had open vats.
- Q. After you had reached the desired formula, when you had the maximum friability or collapsibility, and the maximum strength, did you make satisfactory cores continuously without any failures, or did you have failures?
- A. Yes, we had failures with the gas in the ovens, but so far as the cores were concerned, why, I had—As I explained to you, we used to cook our [896] cores during the noon hour when they would turn the fires out, and we never had any trouble, with the softening of the cores.
- Q. Were all the cores you made when the fire was out satisfactory cores for all purposes?
 - A. Yes, they said they were.
- Q. In the making of cores with your Core-Min-Oil, after you had reached the optimum formula, did you have any difficulty because of the necessity of carefully controlling your temperature and baking time?
- A. No. We did run a lot of tests on different degrees of heat in their ovens over there, but we found it made very little difference. If you had a hot fire, of course, it baked a lot faster than a slow fire, and it didn't seem to affect cores any.
- Q. Well, you had no difficulty such as I have set forth? A. No.
- Q. Did you have any difficulty with cores made by the optimum formula of your Core-Min-Oil be-

cause of the fact the cores would dry out if they were stored for a few days, causing them to crumble?

- A. After they were baked, you mean?
- Q. Yes. A. No.
- Q. Did you have any difficulty because of the sensitivity of the baked core to atmospheric moisture? A. No.
 - Q. Never encountered that at all? A. No.
- Q. Did you hear any complaint made by anyone because of the fact that the Core-Min-Oil was a dirty oil and stained the hands of the persons who used it?

 A. No.
- Q. What did you do, in a practical way, with your Core-Min-Oil after you had completed the development of it, which time we have fixed as approximately two or three months before you came to Shell Company, and the time you went to Shell Company? I don't [897] mean by that the negotiations for contracts, I mean what did you do in a practical way with your Core-Min-Oil?
- A. Well, I went to the American Bitumals Company, and they came over and ran some tests with it, looked at it.
- Q. In other words, during that three-month interval you still continued to run tests and experimental jobs? A. Yes, we did.
- Q. Did you make any attempt to sell it to any foundry for practical use?

 A. No, we did not.

- Q. Did you use it in any foundry in a regular commercial run?
 - A. No, we never attempted to do that.
- Q. Do you recall an instance when you delivered some sand to the Shell Company?
- A. Yes, I think I remember delivering some sand to Shell Company, and Mr. Ray Harsch, I believe, graded the sand; wrote me a letter about the grading.
- Q. Do you also recall that at or about the same time you delivered some Union Oil emulsion to Shell Company?
 - A. I don't know that I did; possibly I did.
 - Q. You have no recollection of that at this time?
- A. I do just vaguely remember that Mr. Mc-Swain asked for it.
 - Q. You do recall the sand incident quite well?
 - A. Yes, I do remember that.
- Q. With respect to the time that you went to the Vulcan Foundry, how does the sand incident fit in, was that before you went to Vulcan?
- A. Yes, I think that was prior to going to Vulcan. That seemed a peculiar situation. The solution would settle, and we had a hard surface on the bottom of the core, and I talked to Mr. McSwain about it, and he thought it was because the sand should be uniform sized, and that was the occasion of taking the sand to Shell, and I remember that Mr. Harsch graded the sand and wrote me a report. [898]

- Q. Have you any idea as to how long after the McCauley visits it was before you had this sand graded?
- A. I think that was one of the first things that was done.
- Q. This sand grading was done, however, after Shell had decided to further investigate the matter at the Vulcan Foundry?
- A. I think it was prior to that, but I am not sure about it.
- Q. Well, go back over the sequence of events again, Mr. Ruddle. You told us yesterday that you first met Mr. McSwain on the street, and on probably the next day you went to visit him at his office, and either that day or the following day, being the third day now, you went over to McCauley's, some cores were made mixed with your Core-Min-Oil, and that the following day you went back to see the finished castings.

 A. That is as I recall it.
 - Q. That is a period of approximately four days? A. Yes.
- Q. At that time you told us it was decided to continue experimenting with your Core-Min-Oil at the Vulcan Foundry, and that Shell was going to conduct the experiments?

 A. Yes.
- Q. Therefore, it must have been after that when you submitted the sand sample to them?
- A. That is possible; I don't remember the date. It is in a letter there written by Mr. Harsch, but it seems to me it was—pardon me.

- Q. You think the letter was before the arrangements were made to go to Vulcan?
- A. Well, about that time, I think; it seems to me just—in my memory it is fixed as something prior.
- Q. I show you Plaintiffs' Exhibit 1 attached to the deposition of Mr. McSwain——

The Witness: It might have been after. It seems to me that is one of the first things that was done, yes. [899]

Mr. Aurich: Q. I show you Plaintiffs' Exhibit 1 attached to the deposition of Mr. McSwain, a letter dated January 14, 1938, from Shell to you, giving you an analysis of some core sand which, according to the letter, you had left with the Shell Company on January 13, 1938. Is that the letter to which you referred?

- A. Yes, that's the one.
- Q. You notice in the first paragraph, second page of that letter, it refers to a testing of some Union Oil emulsion which, according to this letter, had been tested to determine whether or not its essential characteristics were the same as the asphalt emulsion Shell was making.
- A. Yes. That is a little later than was fixed in my mind.
- Q. Viewing the date of this letter, can you tell me now whether that was before or after it had been decided that the Shell Company would do further experimental work at Vulcan?

- A. No, I couldn't tell you. Whether that was before or after?
- Q. You notice in the scond paragraph on page 2 of the letter the writer says that "It is felt that as long as the emulsion will satisfactorily mix with your solution without coagulation or separation the final consistency of the core is definitely a function of the percentage of the solution emulsion mixture to the sand."

In other words, as I interpret the letter, the writer was suggesting that possibly some of the difficulties you were experiencing could be overcome by increasing the solution-emulsion mixture to the sand; is that your understanding of the letter?

- A. No, I don't try to interpret what he meant by that.
 - Q. You received this letter? A. Yes.
- Q. Did you have any understanding as to what the first paragraph on page 2 meant?
- Λ. Well, I say I am not trying to interpret [900] what he means.
- Q. Well, answer this present question, please; when you received this letter did you have any understanding as to what was meant by the first paragraph on page 2?

Mr. Hackley: You want to know, as I understand you, Mr. Aurich, what Mr. Ruddle's then understanding was of that paragraph?

Mr. Aurich: That's right.

The Witness: That is a suggestion that I had the wrong proportion.

- Q. Of what?
- A. Of solution and emulsion.
- Q. What did you do about that, if anything, after the receipt of the letter?
- A. Well, I think I had tried other proportions—tried all proportions.
- Q. I don't understand that last answer. You mean by that that you had tried all proportions before the receipt of the letter, Plaintiffs' Exhibit 1?

 A. That's right.
- Q. Therefore you paid no attention to the suggestion as contained in the letter, Plaintiffs' Exhibit 1?
 - A. No. I think I tried what he suggested there.
- Q. You mean that after the receipt of this letter you adopted his suggestion——
- A. No. I said prior to that I had tried every available proportion that I could figure out, anyway.
- Q. And you were satisfied then that the suggestion contained in the first paragraph of page 2 was of no value?
 - A. Yes; that was my interpretation at that time.
- Q. Have you any knowledge as to the time the Shell Company was testing the Union Oil Company's emulsion?
 - A. Yes. McSwain asked me if I wouldn't give

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
him a sample so they could see whether or not they
could duplicate it.

- Q. When was that? Do you recall, with relation to—— [901]
 - A. Just prior to that letter.
- Q. I appreciate that, but that still doesn't refresh your recollection as to whether it was before or after—— A. No.

Mr. Hackley (Interrupting): Incidentally, I want to add to that statement I made a little earlier, you asked me not to show to Mr. Ruddle Mr. Mc-Swain's testimony, or any of the other depositions in this case. After Mr. Ruddle left last night and until he testified this morning that was not done. You might ask him whether it is correct.

Mr. Aurich: If you say it has not been done that is perfectly all right with me.

Mr. Hackley: I can't say I didn't give him the depositions. I would like to have him state it on the record, however.

The Witness: No, I haven't read anything only what you asked me to read last night.

Mr. Hackley: We endeavored to comply with your wish in that respect, Mr. Aurich.

Mr. Aurich: Your word is perfectly satisfactory to me.

Q. I want to go back again and concentrate on the meeting with the Shell employees and their representatives. Have you thought of anything in adDefendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
dition that was said by you to Mr. McSwain at your
first meeting on Market street?

- A. I just noticed one thing in that that I don't think I related yesterday, that I told Mr. McSwain that I was afraid of large companies, and I had been told that they would take people's patents without consideration, and he assured me that the Shell Company wouldn't do that, and I related to him that as long as he was with the company I would feel perfectly safe, but if he wasn't there it would be different, and he said it wouldn't be different. He said they would always treat me properly. That is one part of the conversation I [902] remember.
- Q. Did you tell him all this on Market street, or did you tell him this at his office when you met him?
- A. I told him that, that conversation took place on Market street, and it also took place at my home one time; he came to my home one evening.
 - Q. When was this?
- A. Well, it was, I think, prior to going over to the Vulcan Foundry.
- Q. In the interval that you ceased work at Mc-Cauley's and before you went to the Vulcan Foundry?
- A. Yes. He came to my home one time to talk to me about this thing.
- Q. Can you recall the substance of the conversation had at that time?

- A. No. He came out and wanted to talk about it; he said he would like to know more about it, and spent the evening with us.
 - Q. "With us"?
 - A. Yes, my wife was there.
- Q. Can you recall anything that was said at that meeting?
- A. I can recall the same conversation took place at the meeting.
- Q. Did you just repeat the same words all the time you had a conversation?
- A. I just told him I was afraid of large companies because of their reputations that I had heard about them, and he assured me the Shell Company would not mistreat me in my way.
- Q. I understand, then, the conversation on Market street and at the conversation at Mr. McSwain's office the next day, and the conversation at your home that you just related, that was practically repetition of what had transpired at all three conversations?
- A. Yes, I think so. We were talking about this generally.
- Q. Wasn't there any specific discussion at all about the use of a core oil and the purpose of a core oil?
 - A. I think I [903] explained to him.
 - Q. Will you tell us what you told him?
 - A. No, I can't recall any specific statement that

I made, or that he made, other than what I have related to you.

- Q. Did he have any familiarity at all with core oil?
- A. No. He said he didn't know anything about core oils, and he asked me about them. I tried to explain to him what I had found out at foundries. I had been in foundries for quite a little while, trying to learn something about the foundry practice, and I related to him what it was.
- Q. When you told him you had a core binder material for use in foundries, did he want to know what a core binding material was used for?
 - A. Yes.
 - Q. In foundries?
 - A. I explained that to him.
 - Q. You can't tell us now what you told him?
 - A. No.
- Q. Did you tell Mr. McSwain that in many instances where it was necessary to use expensive, fine sand, cores made with your Core-Min-Oil required only coarse sand?
 - A. No, I didn't.
 - Q. Is that a true statement?
 - A. Is that a true statement?
- Q. Is the fact that in many instances where it is necessary to use expensive, fine sand, cores made with your Core-Min-Oil require only coarse sand?
- A. Well, it might be that I told him that we could use a cheaper grade of sand and some core

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
oil, but I don't recall it at this time. It is a fact.

- Q. That is a fact?
- A. I think it is a fact, yes.
- Q. Did you tell Mr. McSwain that it was the usual procedure in order to eliminate "burning in" to apply three coats of graphite, and that in Core-Min-Oil only one coat is used?
- A. Well, that is possible; I don't recall any such statement.
 - Q. Is that a true statement of the fact?
- A. Yes. I think in [904] many instances over there we used just one coat of core covering on the casting.
- Q. What is meant by the expression "burning in"?
- A. That is where the core gives away, allows the metal to burn into the core, thereby making a rough casting.
- Q. Did you tell Mr. McSwain that cores made of your Core-Min-Oil required no additional materials and that as the practice was then constituted, in order to make many difficult cores or castings it was necessary to fortify the strength of the core with additional expensive products?
 - A. Yes, that's right.
 - Q. You told that to Mr. McSwain?
 - A. Yes.
- Q. Did you tell Mr. McSwain that a core made with Core-Min-Oil stands great heat, and that in

comparative tests with other standard grade core oils your Core-Min-Oil remained unaffected under great heat, whereas the other materials powdered?

A. That's right.

Mr. Hackley: Do I understand this was all at the first conversation?

Mr. Aurich: No.

Mr. Hackley: This is at any time?

Mr. Aurich: Yes. I am not placing the date. I understand the witness can't recall the time in which he made these statements.

The Witness: No, I couldn't. I haven't any record of them.

- Q. Is that statement I just read to you a true and correct statement?
 - A. Yes, to the best of my knowledge, it is.
- Q. What do you mean by standing great heat and leaving the product unaffected?
- A. Well, that was our difficulty, to get friability.
- Q. Is that what you mean by standing great heat? A. Yes. [905]
- Q. Will you give me your definition of friability?
- A. Well, friability is after a casting is molded and cools off, the sand is supposed to crumble and pour out when tapped with a metal hammer, so they can clean the inside of the casting after it is made.
- Q. Incidentally, what is the largest foundry you have ever visited?

- A. I think the McCauley Foundry. I was in the Pacific Foundry, that is possibly larger, but only foundries here around the Bay.
- Q. Did you tell Mr. McSwain that many core oils throw off troublesome smokes and gases, and that apparently this objectionable feature did not appear in Core-Min-Oil? A. Yes.
 - Q. Is that a true statement? A. Yes.
- Q. Did you tell Mr. McSwain that foundries, in considering all things, costs included, hold to any product which will eliminate or reduce "burning in," and that in some foundries loss through "burning in" is as high as 30 per cent.?
- A. No, I won't say I told him that. We did go to the McCauley Foundry with Mr. McSwain and Mr. Waller, and the Vulcan Foundry with Mr. McSwain and Mr. Waller, and they, that is, Mr. Harold Martin, Mr. Leas, and, I think, Denny Sheehan, at the Vulcan, related that circumstance to us.
- Q. That was knowledge you, personally, didn't have?

 A. No, I didn't.
- Q. Did you tell Mr. McSwain that both the McCauley Foundry and the Kingwell Foundry hold that Core-Min-Oil will not "burn in"?
 - A. No, I don't think I told him that.
 - Q. Was that—— A. He witnessed it.
 - Q. Was that the fact? A. It was.

Mr. Hackley: Would you clear up what he means by the words [906] "he witnessed it"?

Mr. Aurich: Q. What do you mean by "witnessed it"?

- A. Mr. Waller and Mr. McSwain examined many castings.
- Q. You think they had different experience to be able to determine whether there was any "burning in" or not?
- A. No, I wouldn't say that, but they did have experienced men along with them at the foundries, and that was their opinion.
- Q. Did you testify just a moment ago, in answer to my question, that the Kingwell Foundry also claimed that Core-Min-Oil would not "burn in"?
- A. That was a statement made by the Manager of the Kingwell Foundry, that when they used this and then cleaned up they found no gas bubbles in the metal. That was something that he had never experienced before.
- Q. Your formula, your Core-Min-Oil that you used at Kingwell Foundry, was an entirely different formula from that you subsequently adopted for your Core-Min-Oil?
 - A. Yes, that is true.
- Q. Did you tell Mr. McSwain that after the casting is made it is vital that the core disintegrate and fall out of the mold with ease, and that you found after numerous tests that this is best accomplished by the addition of about 25 per cent. of emulsified asphalt into the core mix?

- A. Yes, I would say I told him that.
- Q. That is the fact?
- A. Yes, to the best of my knowledge.
- Q. Where you added the 25 per cent. of asphalt emulsion in a core oil, that was 25 per cent. of what?
- A. Well, that was an estimate of how much that was.
 - Q. In relation to what?
- A. I would say that formula I gave you in the early part of my testimony, that was an estimate, the 25 per cent.
 - Q. 25 per cent. of the entire formula?
- A. That 25 per cent. of [907] all the solution that went in includes asphalt and solution, Ruddle Solution, you call it.
 - Q. Not just asphalt alone, then? A. No.
- Q. Before you went to the Shell Company what did you call your solution? A. Core-Min-Oil.
- Q. You made no distinction between the solution, per se, and the ultimate core oil composition of the solution and asphalt?
- A. No, that was just the general solution, the solution and the asphalt together. We called it Core-Min-Oil.
- Q. You brought it to McCauley's in two different containers?

 A. Yes, that's right.
- Q. After this time that you went, or that you had decided to go to the Vulcan Foundry, I think

you testified yesterday that you had numerous conversations with Mr. McSwain during the interval between leaving McCauley and going to Vulcan.

- A. Yes.
- Q. Can you recall now anything more about the general subject, or anything at any of those conversations than you could yesterday?
 - A. No, nothing more than I just related.
- Q. Before you went to the Vulcan Foundry was anything said by Mr. McSwain relating to entering into a contract with you and Mr. Peck?
- A. I don't think so, at that time. I think it was after we had run some tests at the Vulcan Foundry.
- Q. Can you recall the first time you went to Vulcan Foundry with Mr. McSwain?
 - A. I can't recall the date.
 - Q. Can you recall the occasion?
 - A. Yes, I can recall the occasion.
 - Q. Will you tell me who was there, please?
- A. As I recall, it was Mr. Waller and Mr. Mc-Swain, Mr. Peck and myself went over in one car, and we met Mr. Spotswood there, I think; if I recall, that's what happened. [908]
 - Q. What did you do there?
 - A. We went in and met Mr. Martin.
 - Q. Who performed the introductions?
- A. Lydell Peck. He knew Harold Martin, he went to school with him, I believe.
 - Q. Then what did you do?

- A. Then we told him we came over there and wanted to run some tests.
- Q. Please go on and describe what happened and what was said.
- A. We asked Harold Martin if we could run some tests there at the Vulcan Foundry for the Shell Oil Company, and he said to go right ahead. As I recall it, he took us out and introduced us to Harry Leas, the Foreman of the shop, and then I think Mr. McSwain then made the arrangements with Harry Leas to run some tests.
- Q. At that time, and prior to this time, Shell had decided to undertake the further development of your Core-Min-Oil, had it?
- A. Well, at that time, up until this time they were—they wanted to witness it, see what it was, examine it.
- Q. Had they decided to undertake the further development of your core oil and assist you in perfecting it, or had they not, at the time you went to Vulcan Foundry?
- A. No, I don't think they said anything about developing anything. They went over to test the product.
- Q. Please continue with what happened after you went out and met Mr. Leas?
- A. They made arrangements to go into the foundry to run some tests, and I know they asked me to make up the necessary solution for making the

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
tests, and they brought the asphalt emulsion over
there.

- Q. I want the entire description of what happened at the Vulcan Foundry, I would like to have you tell me as nearly as you can recall what was done, what was said, and by whom?
 - A. Well, we— [909]
 - Q. Did you mix the solution up there?
 - A. Yes.
 - Q. Right there?
 - A. I made the solution at my home.
 - Q. Had you brought it with you?
- A. I think we brought it with us, or we got it the next day, I do not recall. Anyway, I made the solution up and they brought the asphalt emulsion there, and I think possibly it was the following day that we made some tests. Their core-maker is a man by the name of Manuel, he is the one who did the work.
- Q. Was anything said at the first visit other than you have related that you can recall?
- A. No. It was the idea to go over and see—try the solution, see how it worked.
- Q. Would you consider the Vulcan Foundry a fairly large foundry?
 - A. No; it is a small foundry.
- Q. Would you consider the McCauley Foundry a large foundry?
- A. No. They are very small foundries, so far as large foundries go.

- Q. Either that day or the next day you made some tests. Just describe how those tests were made, what you made?
- A. Well, the core-maker, Manuel, made the cores, and Mr.---
 - Q. How did he mix the core oil with the sand?
- A. Well, I think Manuel mixed it up down there.
 - Q. Ey hand?
- A. By hand, yes, measured out an amount of sand we wanted and then the amount of solution, and then the amount of asphalt emulsion.
 - Q. He did that under your direction?
 - A. Yes. We told him how to do it, I told him.
 - Q. You say "we"? A. I told him.
- Mr. Hackley: Q. Who was observing these tests?
- A. Mr. Waller and Mr. Spotswood, and I think Mr. McSwain was there. [910]
- Mr. Hackley: Q. They were standing right there while it was going on?
 - A. Yes. Then he put them in the core box.
 - Mr. Aurich: Q. Immediately?
- A. Immediately, and put them in the oven, and, as I remember, within a few days—
- Q. Let's confine ourselves to the first day, now. I am talking about the first test.
 - A. As I remember, the core came out all right.
 - Q. What time of day was it?

- A. I would say in the morning, but that is a guess.
- Q. Was the furnace a direct or indirect fired furnace?
- A. That was a direct fired furnace. The flame is right on the bottom, on the sides, on each side of the furnace.
- Q. How many cores did he make on that first occasion?
- A. I wouldn't recall now; several, three or four, I would guess, on that occasion.
 - Q. Were they all placed in the oven together?
 - A. Yes.
 - Q. Were they all the same size? A. Yes.
 - Q. Do you recall what they were?
- A. No, I don't even recall, but I think they were cores for Merco-Nordstrom valves, a three-inch valve, I believe.
- Q. Were they of varying thicknesses, or was each core of uniform thickness?
- A. I would think they were all about three inches.
- Q. I am speaking about a single core now. Was the core of a uniform thickness throughout?
- A. No. They are made in halves, and they are circular, so the outside edges are thin, and in the middle it is about an inch and a half from the top to the bottom.
 - Q. How long did it take to bake those cores?
 - A. Twenty minutes.

- Q. Then what happened?
- A. They were taken out and let cool.
- Q. Go ahead.
- A. After they had cooled, why, I think they [911] were taken—I think we brought them back over to San Francisco, if I remember rightly, and McSwain wanted to bring some back here.
- Q. How much time elapsed between the making of the core and the baking?
- A. I would say those cores were put in and baked probably within the next few minutes; I don't know how long it took.
- Q. That is, immediately following the making of the core it was placed right in the furnace, or oven?

 A. Yes.
 - Q. How does the Vulcan Foundry keep its sand?
- A. It keeps it in bins, I think. They ship it in by the carload, and it is brought from the outside.
- Q. Do they keep their sand covered with wet sacks?
 - A. Are you talking about the sand?
- Q. I am talking about the sand after it is mixed with the core oil.
- A. Yes, some of it, where they put a tux in, for instance, to dry very fast.
- Q. What is the general practice at Vulcan Foundry as to whether the sand, after being mixed with the core oil, is covered with wet sacks or not?
- A. Well, some of those are made up, I explained to you, with a tux in it, that is some kind of corn-

starch. Those are covered with wet sacks, but the others, where they used the linseed oil, they didn't have that covered.

- Q. Then you came back to the City and brought the cores back with you?
 - A. That is just to the best of my recollection.
 - Q. That is all we want.
 - A. It is all vague in my mind.
- Q. That is all we can get, is the best of your recollection; no man can do any more. Then when did you next see Mr. McSwain?
- A. Possibly the following day. I think he had Mr. Waller go with me over to Vulcan Foundry and had Mr. Waller watch the operations over there.

[912]

- Q. Had Mr. Waller been there the first day?
- A. Yes, he was there the first day.
- Q. Why did he want him to go the second day?
- A. I don't know. He went many days after that, several days after that.
- Q. Do you know whether Waller was given the task of working with you?
- A. Well, he did work with me on it. I went with him many days over there. They gave him a machine, and we met Mr. Spotswood over there. Spotswood did a lot of work there from then on.
- Q. When was it that it was discovered that the softening of the cores was probably due to the presence of the carbon dioxide gas?

- A. I think that I—we had noticed it, it had been noted, or, in fact, I told them.
 - Q. Told them what?
- A. I told Mr. McSwain and Waller and Mr. Spotswood that at times I noticed the core oil seeemd to settle in the bottom, and we would have a hard—I told them that at the Macauley Foundry.
- Q. My point is, when was that? They discussed what they thought was causing that, didn't they?
- A. Yes. Within a few days, that was sometime at the Vulcan Foundry. The gas wouldn't do it satisfactorily. We thought it was because of humidity in the air, or something, that affected the oven, because the core men over there, the oven men over at Vulcan Foundry told me one day he thought we were all wrong, there was nothing wrong, he had been able to make a number of them without having any trouble.
- Q. Did Vulcan ever use your Core-Min-Oil commercially?
 - A. No; only just to run some tests.
- Q. You do recall the Shell Company, at one stage of the proceedings, at least, came to the conclusion that the softening of the cores was due to the presence of the CO₂ gas in the oven? [913]
 - A. Yes, Mr. Spotswood determined that.
- Q. Where did he make that discovery, do you know? A. At Martinez.
 - Q. When was that?

- A. Well, it was after they had run their tests over there, before they entered into the contract.
- Q. Was it a long time or a short time after your first visit with Mr. McSwain?
- A. Oh, it was after they had been running tests at the Vulcan Foundry.
- Q. Well, we can approximate it this way: You went to Vulcan Foundry approximately two weeks after you first met Mr. McSwain, that is correct?
 - A. That is as I recall it, yes.
- Q. And then commenced your work over at Vulcan from then on? A. Yes.
 - Q. Would they work there every day?
- A. I don't know whether it was every day or not. They would work part of the time at Martinez and then come down to Vulcan and try the stuff.
- Q. Would you go up to Martinez when they were working on this problem?
- A. Yes, I went to Martinez many times with Mr. Waller, and to Vulcan Foundry many times with Mr. Waller.
- Q. So we may assume that it was the forepart of January, 1938, when you first went to the Vulcan Foundry. Can you, using that as a guide, give me the approximate time when the fact that the CO₂ gas was present was considered to be the cause of the softening of the cores?
- A. I don't know that I could give you the time, but I do know when Mr. McSwain called me and told me they were working on the difficulty of the

softening of the cores, that it was a gas, and he asked me to go to Martinez with him, and we went up to talk to Mr. Spotswood, and Mr. Spotswood took a tank of CO2 and with a tube he injected into the solution that CO₂ and it acted on the solution. [914]

- Do you recall approximately when that was?
- No, I couldn't give you the date of it.
- You forget the date. Can you tell me approximately how long it was after this matter came up that that occurred, a month, two months, or three months?
- A. It may be either of those; I wouldn't be able to tell you.
- How many times had you been to Martinez prior to the signing of the contract?
- A. I wouldn't be able to say, only guess, but I was there several times.
 - Q. Half a dozen times?
 - A. Yes; probably more than that.
- Every time you went in to Martinez did you have to sign at the gate, or did somebody have to sign at the gate? A. No.
 - Q. You just walked right in?
- A. No, we didn't walk right in, but if you are with an employee, like Mr. Waller, why, we would go to the gate and he would report he had me with him and we were going to the laboratory, to Mr. Spotswood's laboratory, and that was our purpose of being there.

- Q. Prior to the time that they discovered the CO₂ gas difficulty had there been any discussion between you and Mr. McSwain, or any other representative of Shell, relative to entering into a contract for the marketing of this——
 - A. I would think so, yes.
- Q. I don't mean what you would think. Had there been discussions prior to the discovery of the CO₂ difficulty or not?
- A. Yes, I am sure there was discussion about a contract.
 - Q. When did those discussions originate?
 - A. I couldn't give you the date on it.
 - Q. Can you give me any approximate time?
- A. The negotiations for the contract went over a period of several weeks, and we talked about it for some weeks before that. [915]
- Q. Would you say, then, that the discussions about a contract, forget about that contract, commenced at least a month before the contract was signed?

 A. Yes, I would think possibly.
- Q. That would be around the forepart of March,1938? A. Yes, I would think so.
 - Q. That would be about right?
 - A. I think so.
- Q. Up to that time, up to March, 1938, can you give me the names of the Shell representatives that you had met?
- A. I met Mr. Gratama, Mr. Zublin, Mr. Harsch, Mr. Waller. I was trying to think of the name—

I thought of his name yesterday, that chemist up at——

Mr. Hackley: Yates?

A. Yates, yes.

The Witness: Mr. Spotswood, of course, Mr. Warren, Mr. Snyder. I think that is all I met before the contract was signed. I think I met some others afterward, Mr. Von Doormal, in Mr. Mc-Swain's office.

Mr. Aurich: Q. Can you tell me anything of any conversation that you had with any of the gentlemen you have mentioned, namely, Gratama, Zublin, Harsch, Waller, Spotswood, Yates, Warren, Snyder, and Mr. McSwain between the time of your first visit to Mr. McSwain, or your first meeting with him on Market street, and the signing of the contract?

A. Well, I can't give you conversations, but I know I talked to them.

Q. Can you tell me anything that was said by any of those gentlemen at any time during that interval that you have not already related, of course?

A. No, I don't recall anything specific.

Q. Do you remember anything that you may have said to any of them?

A. No, I don't. [916]

Q. Can you recall the substance of any conversation you had with any of them at any time during the interval in question?

A. No, I don't recall any that I have not related.

- Q. Is there anything that stands out in your mind that may have occurred, or any conversation that you may have had with any of those gentlemen during the time in question?
- A. No, I cannot recall anything I haven't related.
- Q. It was just that you went in and met Mr. McSwain and things just went right along in the ordinary course of events, and there was no occasion for you to remember anything?
 - A. That's right.
- Q. You were meeting with some of these gentlemen constantly, having constant conversations with them?

 A. That's right.
- Q. So that at no time was anything said at any one of those conversations that you have retained in your memory other than what you have already enumerated? A. That's right.

Mr. Hackley: And nothing now occurs to you?

A. Yes, that's right.

Mr. Aurich: Q. Did you give this matter any thought last night, Mr. Ruddle, in attempting to recall the sequence of events that occurred, and leading up to it?

A. Yes, I did, but I couldn't remember anything additional.

Q. Now, I want to go to the period of time just prior to the contract being signed. You discussed this matter with Shell in, say, January of 1938, and the contract was not signed until April of 1938.

What was Shell doing with this Core-Min-Oil in the meantime?

- A. Well, they were running tests at Martinez and over at the Vulcan Foundry.
 - Q. What was the purpose of running these tests?
- A. Well, the first tests that were run were to determine whether or not the solution had merit enough to market. [917]
 - Q. How were the tests run?
- A. Well, I got oral reports from Mr. McSwain almost daily as to the tests that they were making.
- Q. You were watching the tests, yourself, pretty closely at that time, weren't you?
- A. Yes, and I used to stop and talk to Mr. Mc-Swain.
- Q. Do you know when they decided that it was a marketable product? A. Well——
- Q. That is, when they told you that they had decided, I will put it that way.
- A. No, I wouldn't remember the date, but it was after they had been running some tests at Vulcan.
- Q. Was it before or after they had discovered the cause of the softening of the cores?
- A. I think it was prior to their finding out the reason for the softening of the cores.
- Q. In other words, you believe that Shell had advised you that they considered that your Core-Min-Oil was a marketable product, notwithstanding the fact that they had not been able to overcome this difficulty of softening of the cores?

- A. Well, I wouldn't say they thought it was ready to be put on the market, but they were interested enough in it to want to sign a contract on it before they had discovered what caused it, I think.
- Q. I was directing your attention to the time when Shell advised you that they felt they had a marketable product. Now, certainly, it wasn't a marketable product prior to the overcoming of the softening of the cores, was it?
- A. Well, I would say you would have to put—that you couldn't sell it in an enclosed—I mean an open air furnace.
- Q. Let me put it this way: Could you have marketed your Core-Min-Oil to the Macauley Foundry for their commercial operations?
 - A. No, I don't think we could have.
- Q. Could you have marketed it to Vulcan Foundry for their commer- [918] cial operations prior to the discovery of what was causing the softening of the cores?
- A. No, I think we would have had to determine that.
- Q. You didn't know what was causing the softening of the cores?

 A. No.
- Q. Isn't it a fair statement that prior to the solving of that problem you didn't have a marketable product?
- A. Well, that is possible, but the Shell Company were interested in making a contract with us prior to that time, certainly.

- Q. That hasn't anything to do with my question, Mr. Ruddle. If we just take this little by little we will get it all. Will you read by last question to the witness and see if you can answer it for me, Mr. Ruddle?
- A. Yes, I would say that would be a fair statement.
- Q. Then, prior to the time that Shell discovered what they thought was the answer to that problem you had no marketable product, although they might have been interested in it?
 - A. That's right.
- Q. And it is your testimony now that prior to the solving of that problem, namely, the softening of the cores, Shell was talking about entering into a contract with you?

 A. That's right.
- Q. Who first brought up the subject of a contract? A. Mr. McSwain. [919]

Mr. Aurich: Q. Mr. Ruddle, did I understand you to say that at no time prior to your interview with Mr. McSwain concerning your Core-Min-Oil did you ever attempt to put your Core-Min-Oil into a single package or a ready-to-use oil?

- A. Well, I put them together, but I didn't attempt to keep them in one package.
- Q. Why was that? A. Well, the solution is so much heavier than the oil that it was hard to do.
 - Q. In other words, you were unable to produce

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
a commercially successful core oil in a ready to use

form?

- A. Yes, that's right; that is, in one package.
- Q. That's right. Did you discuss that fact with any of the men in the foundries at which you experimented with your Core-Min-Oil?
- A. Well, I don't recall that I did. I told them that I had it in two packages.
 - Q. I suppose this was at McCauley's ?
 - A. At Macauley's, yes.
- Q. I suppose that is because McCauley is the only foundry, as I understand it, at which you actually experimented with your present Core-Min-Oil, and by "present Core-Min-Oil" I mean the Core-Min-Oil that you took to Shell.

 A. Yes.
 - Q. Is that statement correct?
 - A. Yes, that is a correct statement.
- Q. With whom did you discuss the fact that you were unable to produce a core oil in a single package, or ready to use at McCauley?
- A. I don't know that I discussed it with anybody. [920] I think I just told the core men there, and possibly Mr. Olson, that it was in just two packages.
- Q. Did anyone at McCauley express any criticism of the fact that the oil would have to be bought in two packages, or two containers?
 - A. No, not that I recall.
 - Q. Then did you not believe that that was a

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
difficulty that you might encounter in successfully
marketing your Core-Min-Oil?

- A. Well, I do remember—I can't recall that it was, and I say this, that it didn't make any difference, because they had to put in so many different products, anyway.
- Q. Had to put in so many different products in what?
- A. In mixing it with the sand they had a number of things that had to be mixed in with the sand after that, such as tux, and, I don't know, a number of—silicon, I believe, was one which came in a sack; it looked like rock salt. That was one element they put in.
 - Q. Any others?
- A. Yes, there were quite a few, I don't know the names.
 - Q. Were those oils ??
- A. No, they were just elements that they put in to make up the different mixes before they used them for molding sand.
- Q. You were present at quite a few of the tests and experiments that Shell carried on between the time you first took your Core-Min-Oil to them and the time the contract was signed?

 A. Yes.
- Q. Did you ever witness them making any tests on core oils in which they used ingredients other than your Core-Min-Oil and asphalt emulsion during that time?

 A. Any other——
 - Q. Ingredients.

- A. That is the Shell, you are talking about? [921]
 - Q. Yes. A. No, not that I recall.
- Q. You don't recall ever being present at any time when cores were made with the core oil which did not contain your solution and asphalt emulsion during the period of time in question, here?
 - A. No, I don't think so.
 - Q. Up to the signing of the contract?
 - A. I wouldn't think so.
- Q. For example, were you ever present at the Vulcan Foundry sometime prior to the signing of the contract, when a series of cores were made with a core oil consisting of sodium silicate and asphalt emulsion? A. No.
- Q. You never saw anyone from the Shell Company performing such an operation?
- A. No, I don't think I was present when they did it. I remember seeing some cores over in the Shell Building that they told me were some that were made with sodium silicate and some with plain, the Ruddle Solution, as you term it.
- Q. Was it before the contract was signed or after? A. I wouldn't know.
- Q. Are you fairly clear in your mind that you never saw anyone from Shell make cores with just sodium silicate and asphalt emulsion before the contract was signed, or do you just have no recollection of it?
 - A. Well, I haven't any recollection of it.

- Q. Can you tell me approximately the first time you ever met Mr. Gratama?
- A. Well, it was during the negotiations, as I recall, for the contract.
- Q. Can you give me any idea of how long prior to the signing of the contract it was when you first met him?
 - A. Possibly two or three weeks.
- Q. That would be sometime probably in the latter part of March, 1938?
 - A. That would be my guess. [922]
- Q. What was the occasion for your meeting with Mr. Gratama at that time?
- A. To discuss the contract, the proposed contract.
 - Q. Who introduced you to Mr. Gratama?
 - A. As I recall it, Mr. McSwain did.
- Q. Can you recall any conversation that you had with Mr. McSwain between the time you first met him and the signing of the contract?

Mr. Hackley: Just a moment. Are you inquiring into conversations relating to the contract, negotiations leading to the drafting and signing of the contract?

Mr. Aurich: Yes.

Mr. Hackley: I will object to the taking of any testimony on that subject, on the ground that it relates to an instrument in writing, which instrument is of record here, and is admitted by the defendants to be the contract of November 8, 1938, between the

parties. There has been no showing or contention of ambiguity of the instrument. I suggest, Mr. Aurich, that since we have no judge present to rule, and that you no doubt will press the question——

Mr. Aurich: Yes.

Mr. Hackley (continuing): ——that it will be considered that my objection be a continuing one to all testimony which I construe to relate to the instrument, and any testimony to alter that instrument.

Mr. Aurich: That is perfectly satisfactory.

The Witness: Well, if I am right in my memory, I think [923] that Mr. McSwain brought Mr. Gratama over to Mr. Peck's office with a proposed form of contract. It wasn't something to be signed, but it was a memorandum of something to discuss, and that, as I remember, was the first time that I met Mr. Gratama.

Q. Do you recall anything that was said at that meeting by anyone present—strike that question.

Who was present at that meeting?

A. As I recall it, Mr. James F. Peck, Lydell Peck, myself, Mr. McSwain, and Mr. Gratama; I don't know whether there was anyone else there, or not. That is all I can recall.

Q. Can you recall what was said by anyone at that meeting?

A. Only generally, we discussed the memorandum that they had.

- Q. Did they leave the memorandum with you?
- A. I don't know whether they did, or not. I have an idea that they didn't.
 - Q. You don't have it now?
- A. I do not have it now, but they made notations on it, I think, and took it back.
- Q. I now show you Plaintiff's Exhibit 3, annexed to the deposition of Mr. McSwain, which is a draft of an agreement, and I will ask you if that is the memorandum agreement that was brought over to you, and the two Mr. Pecks, by Mr. McSwain and Mr. Gratama at the conversation that you have just described?
 - A. I would say that it wasn't.
 - Q. It was not?
- A. No. I would say—I believe it had a heading, I think it was entitled "Memorandum."
- Q. Following that meeting with Mr. Gratama, when was the next time you met him?
- A. I couldn't recall. We continued, I think, for two or three weeks, possibly.
- . Q. Meeting quite frequently?
 - A. Meeting every day or two, every few days.
- Q. What was the occasion of Mr. McSwain and Mr. Gratama bringing [924] you this memorandum?
- A. Mr. McSwain had suggested that we enter into a contract, had asked that we enter into a contract, and that was the start of the negotiations.
- Q. During all of that interval between the time you first met Mr. Gratama and the signing of the

contract, can you tell me anything that was said by Mr. Gratama to you or Mr. Peck, or anything that you said to Mr. Gratama?

A. No, I don't recall any conversation at all.

Mr. Aurich: Q. When was the first time you ever met Mr. Zublin?

- A. I can't recall whether I met Mr. Zublin before or after the contract was signed. [925]
- Q. Do you recall the occasion of your first meeting him, irrespective of the date?
- A. No, I can't do that, either. I remember after the contract was signed of going over to Mr. Zublin's office. Whether I met him before that I can't recall.
 - Q. You have no recollection of that at this time?
 - A. No, I haven't.
- Q. Can you recall whether or not you ever met Mr. Zublin before you disclosed the formula of your Core-Min-Oil to him?
- A. No, I can't. I know on one occasion Mr. Zublin went up to my apartment on another matter, but whether that was before or after I don't know.
- Q. Now, again going to the circumstances leading up to the signing of the contract, generally, when you first approached Mr. McSwain with your Core-Min-Oil proposition, whenever it was, on Market street, you had the idea in mind that perhaps you could interest Shell in the matter sufficiently to induce them to take it over and market and sell it for you; is that right?

- A. Yes. I had thought of every available person that might market it, including the Shell.
- Q. Did you mention to Mr. McSwain at your first meeting with him that that was what you had in mind? A. Yes.
 - Q. You didn't tell us that yesterday, did you?
 - A. No, I don't know whether I did, or not.
- Q. Well, it doesn't matter, doesn't make much difference whether you did or not. Will you tell us about it now, what you told Mr. McSwain at your first meeting with him regarding your desire of entering into a contract with Shell?
- A. Well, I met him on the street and he asked what I was doing, and I told him I had this core oil, and I was looking for somebody to market it. [926]
- Q. Well, did you suggest to him that you had Shell in mind as one of the possibilities that might be interested in it?
- A. I think probably I asked him if they would be interested in it.
- Q. Did you mention to him that if so it might be advisable to have a contract prepared and signed?

 A. No, not at that time.
- Q. Did you mention anything to him about the terms of any such contract that you might draw up? A. No.

Mr. Hackley: This is still the first conversation on Market street?

Mr. Aurich: Yes. When was the first time that

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
the question of entering into a contract between
you and Shell was discussed?

- A. As I recall, after we had gone to Vulcan Foundry and had demonstrated it to Mr. Waller, and Mr. McSwain, and Mr. Spotswood, Mr. McSwain asked that we draw up a contract with the Shell Company.
 - Q. What did you say?
 - A. I said, "All right."
 - Q. Who finally drew up the contract?
 - A. The Shell Company.
- Q. Did you tell Mr. McSwain, "Well, all right, we will be glad to enter into a contract with you, but you draw it up"?
- A. Well, now, I can't recall whether we suggested who should draw the contract. We talked about the contract with him, and he said that he would have one drawn.
- Q. Were you surprised to have Mr. McSwain make this statement to you right out of the blue, so to speak?
- A. Well, I don't consider a statement like that out of the blue. He had been examining it for weeks.
- Q. You think Mr. McSwain had in the back of his mind all the time that he was experimenting with this Core-Min-Oil the idea of entering into a contract?
- A. I have no idea what was in the back of his mind.

- Q. But that was in your mind?
- A. Certainly. We wanted to market [927] it.
- Q. Did you ever tell Mr. McSwain that the American Bitumals Company was interested in this product?
- A. I told him we had been negotiating with American Bitumals Company.
- Q. Did vou tell him your negotiations had broken down? A. Yes.
- Q. Did you tell him that other companies had been interested in it? A. I did.
- Q. Did you tell him your negotiations had broken down? A. I did.
- Q. You didn't lead him to believe by any conversation that those negotiations were still pending, and that if he wanted to enjoy whatever benefit Shell Company could get from the Core-Min-Oil that he had better sign a contract with vou?
 - A. Certainly not.
- Q. Where was this conversation relating to the contract? A. I don't recall just where it was.
 - Q. Do you know who was present?
- A. No, I don't know that I do, but I think Lydell Peck was present.
 - Q. Who was present on behalf of Shell?
 - A. You mean McSwain?
- Q. No. Who was present on behalf of Shell, outside of McSwain?
- A. Possibly Waller was there, but I wouldn't be sure.

- Q. Mr. Harsch? A. I don't think so.
- Q. Were any terms discussed at that time?
- A. No, I don't think so, only just generally about their selling it.
- Q. No discussion about the minimums, for example, you would require?
- A. Yes, we required minimums, but that came not at that time; it came up when we started negotiations, when he started bringing over the memoranda; that is when we talked about terms of it. We asked for a large minimum. I think Mr. Gratama was there, and Mr. Gratama said that they wouldn't agree to a large minimum because our interests were parallel, and naturally if they took it up to sell—we would have to [928] depend on them to get the most out of it.
- Q. If I understand you correctly, you, Mr. Peck, Lydell Peck, Mr. McSwain, probably Mr. Waller, were some place at some time, and Mr. McSwain said, "How about us entering into a contract to market this material?", and you said "Fine," and he said, "Well, we will prepare a draft of a contract, or memorandum, and bring it over to you." Is that about the way—
- A. That is as I remember it, something similar to that.
- Q. He had no idea of how much of a royalty you were going to demand?
- A. Yes, I think we discussed generally the terms of what a contract should be, but I don't recall at

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
this instant when these things were said. I remember they were said.

- Q. You heard it discussed generally, the terms?
- A. Yes, because I believe the memorandum that was brought over there generally had most of these terms in it, as I recall.
- Q. Have you any idea as to how much time elapsed between this conversation with Mr. Mc-Swain, when he suggested that perhaps a contract would be advisable, and the time that the first memorandum was presented to you?
 - A. No. I would say within a few days, though.
- Q. This whole period of negotiations, as I understand it, was about two weeks in length?
 - A. I would think that, yes.
- Q. From the time Mr. McSwain first mentioned it until the contract was finally consummated?
- A. Well, yes, I would guess that is about the time.
- Q. During that two weeks period you had many conversations with Shell representatives concerning the contract?

 A. Yes, nearly every day.
- Q. With any representatives or any others than those names you gave me this morning, I have them here if you want me to read [929] them to you.
- A. No. I think I included all of them that were there.
- Q. Can you recall, either exactly or in substance, anything that was said by any of those

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
gentlemen during the period of the negotiations for
the contract?

- A. Not other than I have related.
- Q. Other than that you just discussed the terms of the contract? A. That's right.
- Q. Do you recall when the almost final draft of the contract was completed?
- A. Well, I would say that one was almost the final draft. It might have been changed a time or two after that, but I would say that was almost the final draft.
- Q. By "that one," you mean Plaintiffs' Exhibit 3 on the deposition of Mr. McSwain?
 - A. Yes.
- Q. Who prepared Plaintiffs' Exhibit 3, so far as you know?
- A. Mr. McSwain brought it to the office with Mr. Gratama.
- Q. It wasn't prepared by either you or Mr. Peck, or anyone associated with you?
- A. No. Those were all prepared out of Mr. Peck's office.

Mr. Hackley: Do you mean outside of-

A. Yes, outside.

Mr. Hackley: Away from.

A. Away from.

Mr. Aurich: Q. Did you ever prepare, or have prepared for you, any draft of an agreement to submit as a counter proposal, or did you just take their draft and discuss it from there?

- A. As I recall, we just discussed it from their draft, I don't think we did—it is possible we did but I don't know.
- Q. How many drafts such as Plaintiffs' Exhibit 3 were prepared, do you recall?
- A. I think there were several; there were three or four, possibly. [930]
- Q. Do you have in your possession any draft of the license agreement in controversy, other than Plaintiffs' Exhibit 3?
 - A. No. I think that is the only one we had.
 - Q. Have you made a search for it?
 - A. Yes.
- Q. Plaintiffs' Exhibit 3 is the only one you can find?
- A. That is the only one I think that we have; the only one I could find, anyway.
- Q. Do you recall the circumstances of discussing Plaintiffs' Exhibit 3? A. Yes.
 - Q. Do you recall that quite definitely?
- A. It was almost the final draft I mentioned a core covering, and Mr. Gratama asked that it be included in the contract, and Mr. Lydell Peck insisted that we keep it separate, market it separate from Shell. Anyway, Mr. Gratama seemed to want to include it, and threatened not to enter into the contract unless it was put in, so we finally agreed to put it in, and those changes were made because of it.
 - Q. By "core covering" you mean core wash?

- A. Yes, core wash.
- Q. In other words, all the interlineations appearing on this exhibit were put in there to cover the core wash?
- A. Oh, not entirely, I don't mean that. That was the reason for this changing. I remember Lydell Peck said we would like to keep it out because suppose Shell wouldn't market it for some time, we would like to be able to put that on the market ourselves, get a return on it, so Gratama said, "Well, we will put everything that pertains to foundry use in this contract."
- Q. So that at the time this draft of a license agreement, Plaintiffs' Exhibit 3, was discussed?
 - A. That first draft, you are talking about?
- Q. No. I am talking about the circumstances you have just re- [931] lated at the time that this particular document I have in my hand, Plaintiffs' Exhibit 3, was under discussion?
 - A. That's right.
- Q. It was not previous to the discussion of Plaintiffs' Exhibit 3?
- A. No, that was the time, and Mr. McSwain wrote those in at the time, in his own handwriting.
 - Q. Who was present?
- A. Lydell Peck and Mr. James F. Peck, Mr. McSwain and Mr. Gratama.
- Q. Was Mr. James F. Peck present at practically all the conferences relating to the execution of the contract? A. Yes.

- Q. These changes that you have referred to, they were inserted finally by Mr. McSwain because of Mr. Gratama's insistence that the contract be broadened to include your core wash?
- A. That's right, and then we insisted that if it included core wash that it includes "all compositions for foundry use."
- Q. That was the reason for the inclusion of the words, for example, on the first page, "A new composition for other foundry uses, such as core covering"?

 A. That's right.
 - Q. Who dictated these changes to Mr. McSwain?
- A. I don't know that anybody dictated them. That was the result of a conversation, and Mr. Mc-Swain wrote those in so it would be agreeable to both parties.
- Q. Did McSwain have a draft of this agreement with him?
- A. Yes, I think there were two of them, and we kept one of them, and he took the other away, and it was drafted into the final draft, and from there, I think it might have been changed after that, the next day, it might have been changed, too, but we haven't any copy of it.
- Q. In other words, you think that Plaintiffs' Exhibit 3, even changed as it is, might not have been the agreement that was [932] finally dictated?
- A. Yes, that's possible, but I don't know that to be the fact.
 - Q. How does it happen that this license agree-

ment is dated—Let me strike that question.

How does it happen that Plaintiffs' Exhibit 3, which is a draft of the license agreement, is dated April 8, 1938?

- A. I don't know, unless it was retyped that day. It just occurs to me that it was typed in on the original from this, that was just copied into the original on a typewriter.
- Q. By "this" you mean "A new composition for other foundry uses, such as core covering"?
- A. Yes. That, I think, was typed into the draft or either rewritten off that same draft.
- Q. This entire exhibit had to be rewritten, didn't it, before you could sign it?

A. Well, now—

Mr. Hackley: Let the witness examine it.

The Witness: May I see the original?

Mr. Hackley: I am not sure that I have one here. Have you got the original contract here?

Mr. Aurich: No, we haven't the original.

Mr. Hackley: I don't have it here, either.

The Witness: That would appear that it would have to be rewritten, but I don't know what they did. I know you—

Mr. Aurich (Interrupting): Q. You can't give me any information, then, why the draft of the license agreement, Plaintiffs' Exhibit 3, bears a date of April 8, 1938?

- A. No, I couldn't tell you.
- Q. Could it be possible that the license agree-

ment was not actually signed on April 8, 1938?

- A. Well, I couldn't tell you that, either.
- Q. Following the signing of the contract in controversy, I under- [933] stand that you then and there disclosed your so-called secret formula to Mr. Gratama and Mr. McSwain?
 - A. That's right.
- Q. What is the next thing that happened in the course of events that you recall?
- A. I think the following day, or the day after, we went to Martinez and there I disclosed to Mr. Yates, I think Mr. Zublin went along, but I am not positive about that, but Mr. Waller, and Mr. McSwain, and Mr. Spotswood were present, and I think Mr. Snyder, at the Martinez laboratory.
 - Q. Was this disclosure in writing, or orally?
- A. I imagine they wrote it down. I don't know that I gave it to them in writing.
 - Q. I meant how did you tell it to them?
- A. I imagine I told them about it, and they wrote it down, or I even wrote it down for them; I don't know.
 - Q. You don't recall that?
- A. No, I don't recall that. I know I made the solution for them before them at that time.
 - Q. Did you make up some solution for them?
 - A. Yes.
 - Q. Right then and there?
 - A. Right then and there.

- Q. What was said by anybody at that time and place, if you recall?
- A. I remember Mr. Yates saying he had some of the solution previously that I had given to the Shell Company, I think I gave it to Mr. McSwain, and he said that he had analyzed it and he said that he didn't have the correct analysis of it, and was glad that he hadn't signed the report.
 - Q. Pardon me?
- A. He said he was glad he hadn't signed the report of the analysis.
- Q. What else happened at that meeting at Martinez?
- A. Well, I don't recall anything else other than telling them about the solution and its use in cores.
 - Q. Tell me what you told them.
- A. I don't recall only just [934] telling them generally.
 - Q. Then what happened?
 - A. I think we returned home.
- Q. What is the next thing that happened in the order of events? When did you next have any contact with anybody from Shell?
- A. I have a faint recollection of seeing Mr. Mc-Swain the next day.
 - Q. Do you recall the meeting at this time?
 - A. No, I don't.
- Q. Do you recall anything that was said by Mr. McSwain?

- A. Only that we would go over to—I don't recall just what happened at that time.
- Q. Did Shell, so far as you know, immediately start to experiment with your Core-Min-Oil?
 - A. Yes.
 - Q. Where did they carry on those experiments?
 - A. At the Vulcan Foundry.
 - Q. Did they carry them on at any place else?
 - A. Up at Martinez in their laboratory.
- Q. Did they subsequently carry on any experiments at any place other than the Vulcan Foundry and at Martinez?
- A. I think they went over to Shell Development Company, if that is what you mean.
 - Q. Where?
- A. At Emeryville. I went over there at one time.
- Q. How often would you visit the Vulcan Foundry during, let's say, April and May, in 1938, while Shell was working with your core oil?
- A. I went over two or three times a week, I think, with Mr. Waller.
 - Q. What would you do while over there?
- A. We would inspect the cores and the work that Mr. Spotswood was doing. He used an electric oven from the Martinez plant, brought it down to the Vulcan Foundry, and then he made a lot—many cores, for example, the Merco Nordstrum valve castings.
 - Q. Were the cores uniformly successful?

- A. Well, in baking [935] them in an electric oven they were.
 - Q. Uniformly so? A. Yes.
 - Q. As to all the characteristics of a core oil?
- A. Well, now, I don't know that they all were, because he tried different variations, but those that I saw, where he used the materials that I gave him, were all good.
- Q. You keep saying "him". I suppose you mean Mr. Spotswood? A. Yes.
- Q. Do you know why he was trying different variations?
- A. Yes. They were trying to get all the information they could for sales purposes, because Mr. McSwain said they wanted to get a background of several thousand castings so they could use it in their sales organization.
- Q. Did you tell them that there was no use in their experimenting with various proportions, and you had been all through that, and that the formula you had given them was the best that they could expect to get?
- A. No, although Mr. McSwain said they were trying to put it into one package, and the reason for that he gave was that he quoted some law that he said you could not sell a patented article, you couldn't control the sale of an unpatented article with a patented article; that is, you could not sell our patented article and you couldn't control the

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
sale of asphalt, and for that reason he wanted to

sale of asphalt, and for that reason he wanted to put it in one package, not to get a better price.

- Q. Was this in the early stage following the signing of the contract, or did that come later?
- A. Yes, I think it was in the very early stage, I think they started at that time to put it in one package.
- Q. So that they were experimenting with various proportions of your formula, not with the idea of improving the formula, but [936] with the idea of attempting to place it in one package?
 - A. That's the way they told me.
 - Q. That's the way they told you? A. Yes.
- Q. During this period of time after the signing of the contract did you witness anyone from Shell making any cores with the core oil which did not contain sodium silicate?

 A. No.
- Q. I will reframe the question. At any time following the signing of the contract, did you witness anyone from Shell making any cores with just sodium silicate and asphalt emulsion?
 - A. No. I didn't.
- Q. At the time you had visited with Mr. Spotswood over at Emeryville, Vulcan, you observed what he was doing?
 - A. Yes, I did when I was there.
- Q. Did you see the material he was working with?
- A. Yes, but that wouldn't—you would not be able to tell by looking at a material what he was do-

ing. You could tell a sodium silicate material, but you couldn't tell what it was.

- Q. Did you ever observe anyone from Shell making up a core oil, mixing it? A. No.
- Q. You were never at Martinez when Mr. Spotswood mixed up core oil?
 - A. Only when I showed him, the first time.
- Q. Can you recall, let's say, the forepart of 1938, in April, until June or July, any conversation you had with Mr. Spotswood?
- A. Only generally what was done up there until the Spotswood application. I think that is the last time I was up to Martinez, and just general conversation, what he was doing. Mr. McSwain used to tell me all the time what they were doing, they were going to market their product within the next week or ten days; that was every time I met him.
- Q. Can you tell me one specific instance, giving me the time, the [937] place, and the persons present, that Mr. McSwain made that statement to you?
- A. I can't give you the time, but I can tell you the place, and I can tell you who was with me when he made that statement, not once but many times. Lydell Peck was with me, went with me over to Floyd McSwain's office on many occasions.
 - Q. Can you remember one occasion?
- A. I can't give you the date, but I do remember distinctly going there when that was told to me several times in the presence of Mr. Peck.

- Q. Was anyone else there outside of you, Mr. McSwain, and Mr. Peck?
- A. I don't recall anyone else. It is possible Ray Harsch was there, but I am not sure. His office was next to McSwain's.
- Q. Do you recall at any time that Mr. McSwain made any statement that there was anyone else present, outside of yourself, Mr. Peck, and Mr. McSwain?
- A. No, I can't recall that he made that in the presence of anyone else other than Mr. Peck.
- Q. What was the occasion of his making that statement to you?
- A. Because we were insisting upon this being marketed.
 - Q. By "this" you mean Core-Min-Oil?
- A. Yes, and we would go over and talk to him about it to find out when they were going to start marketing it, and those were the answers we got.
- Q. What were the answers you got, will you repeat it?
- A. That the Shell were going to put it on the market within the next week or next ten days, the next two weeks.
- Q. This would last during the entire period that Shell was working on this problem?
- A. Yes, while they were trying to put it in the one package. McSwain always said if they couldn't put it in one package they would market it in two packages.

- Q. When did Mr. McSwain start to make these remarks?
- A. I don't know when he didn't make it after the contract was [938] signed. We had always asked him to get it on the market.
- Q. Now, is it your testimony that three days after the contract was signed, for example, Mr. McSwain said, "We will have your Core-Min-Oil ready to market in ten days"?
 - A. No, that is not my testimony.
- Q. That is what I am trying to find out. How long after the signing of the contract was it before Mr. McSwain commenced to make the statement you attribute to him?
- A. Possibly a month after the contract was signed, maybe; might have been as much as two months, but not so very long after the contract was signed that we received those promises.
 - Q. When did those promises end?
- A. They were made up until a letter, just before a letter we received from Mr. McLaren, as I remember. Mr. McSwain said to me one day, "It doesn't look very good for the Core-Min-Oil." He said, "We have been able now to do the same thing with linseed oil and other materials." He said an albino asphalt, I think that was one of the parts. The said the albino asphalt and linseed oil, he would be able to make a core that had all the good qualities that our core had, and the same drying time, but I can't recall just what the good qualities were

Defendants' Exhibit DDD—(Continued)
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that he enumerated to me at that time. Anyway,
it was a perfect core oil, with the same drying time
that our core oil had.

- Q. I will go into that statement a little bit later in detail, I don't want to shut you off, I am more interested in another point at the present time in one of your previous answers. You said that Mr. McSwain kept making these statements to you, more or less frequently, from a period of about a month or two months after the signing of the contract until around the time that a letter was received by you from the Shell Oil Company, signed [939] by Mr. McLaren?
- A. Yes. This might have been after, a little while after that.
 - Q. It was about that time?
 - A. I would say about that time.
- Q. I show you a letter dated July 26, 1939, which is attached to your complaint and marked Exhibit D, and which is the letter by which Shell gave you notice that they didn't intend to have anything further to do with the contract, and ask you if that is the letter to which you referred.
- A. Yes, that's the letter Mr. McSwain told me at the time that we were going to receive the letter.
- Q. So it was within the course of a week at the outside?

 A. Well, I wouldn't try to place it.
 - Q. A few days, around there?
- A. Yes. I don't think it was more than two weeks prior to that.

- Q. You were rather impatient about this Core-Min-Oil of yours getting on the market?
 - A. Yes.
- Q. You were extremely anxious that Shell should, as you termed it, live up to the provisions of its contract to market this oil so that you would receive the revenue that was promised you under the contract? A. That's right.
- Q. Did you ever call Mr. McSwain's attenton to the fact that a year ago, for example, "You told me it would be on the market in two weeks and here a year has gone by; what's the matter?"
- A. I don't think it was done that way, because we were telling him all the time we were anxious to do something with it.
- Q. He just kept telling you, "We will have it ready in a week or ten days"?
- A. Yes. He said, "I will get a report and see when we will have it completed, we think the emulsion is good now, and we are going to start marketing it." Then he said, "We probably will have headquarters for it in St. Louis, Missouri, because all [940] the big foundries are back there."
 - Q. When was this?
- A. That was during the time the contract was in force.
- Q. You can't fix even the approximate date of that?
- A. No. I can remember that it was about the time Mr. (tuepin went back East to stay, because

he said he would probably get some help from Mr. Guepin back there in St. Louis.

- What did you mean in your last answer when you said the emulsion was good?
- They were having trouble with the product Α. separating.
- That is when they were trying to make a ready-to-use oil? A. Ves.
- Q. Do you know of your own knowledge whether or not the Shell Company was successful in making a ready-to-use oil from your Core-Min-Oil?
 - A. No, I don't know.
- Now, after the signing of the contract you met some other representatives of Shell, I take it?
- Mr. Hackley: By "representatives" do vou mean employees, laboratory technicians and the like?

Mr. Aurich: Anybody connected with the company.

The Witness: I went over to Shell Development Company at Emeryville, and there I met Dr. Tuemmler.

- When was it you went to Emeryville?
- It was soon after the contract was signed, when they were trying to put it in one package.
- Was that the first time they really attempted to do that, Mr. Ruddle, so far as you know?
- A. No, I don't know that it was. I know Spotswood did some work on friability, and for trying tensile strength, and he made a muffle furnace, he

called it, a little furnace that only generated 1400 degrees of heat, and he [941] was putting cores in that to test friability; I remember that.

- Q. Did you meet anybody over at Emeryville other than Dr. Tuemmler?
 - A. At the Shell Development Company?
 - Q. Yes.
- A. I possibly did, but I don't recall who they were. I met Mr. Von Doormal and Mr. Wright, I think together, and one other gentleman from the Shell Development Company in Mr. McSwain's office a time or two.
- Q. Did you have any conversation with Dr. Tuemmler at Emeryville? A. Yes.
 - Q. Do you recall what it was about?
- A. No, I don't. I don't recall what it was about.
- Q. Can you recall anything that was said by Dr. Tuemmler at that meeting?
- A. No. He had run a test of some kind and I don't even know what the test was.
- Q. Did you ever meet him again after that first meeting?
 - A. No, I think that is the first time.
 - Q. Who else was present, if anyone, at the time?
 - A. Mr. McSwain, I think, was the only person.
 - Q. Where did you meet Mr. Wright?
 - A. I think in Mr. McSwain's office.
 - Q. Once? A. Once, I think, is all.

- Q. Was that the only occasion you ever met the gentleman? A. That is all.
- Q. Do you recall what you talked about with him?
- A. No, only just met him, was all. I think Mr. McSwain asked him how they were coming along over at Emeryville on emulsifying the product, and he said "Fine," or something like that.
- Q. How about Mr. Von Doormal, where did you meet him? [942]
 - A. I met him also, I think, at the same time.
 - Q. Did you ever meet him more than once?
 - A. No, just the one time.
 - Q. Do you recall any discussion with him?
 - A. No.
- Q. Do you know now long the Shell Company continued to experiment with your Core-Min-Oil at the Vulcan Foundry?
- A. I think they ran tests over there until almost the time of that letter. I knew nothing about their tests after the Spotswood application was put in and Shell Company wanted me to sign an assignment to Shell of the Spotswood application, which I refused, and from then on, why, I wasn't taken in on anything.
 - Q. Do you know when that was?
- A. Well, it would be about the date of that letter.
 - Q. Do you think it was as late as that when you

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
had the difficulty over the Spotswood-Ruddle application?

- A. Yes, that letter had to do with the Spotswood application, I am sure.
- Q. I am not sure what exhibit you refer to. I show you Defendants' Exhibit R. Is that the letter you have reference to when you say that you had reference to the Spotswood-Ruddle application?
 - A. No, that is not the letter I had in mind.
- Q. Defendants' Exhibit R has nothing to do with the Spotswood-Ruddle application?
 - A. No, that is not the letter I had in mind.
- Q. Will you please listen to the question? My question was Defendants' Exhibit R doesn't have any reference to the Spotswood-Ruddle application, does it?
- A. I don't know whether it has or not; I would have to see the other correspondence to see whether or not.
- Q. You have no recollection now as to what the substance is of this letter which you wrote to Shell on December 9, 1938, [943] which is Defendant's Exhibit R?
- A. No, I wouldn't know. I would have to look at the rest of the correspondence to tell you what that means.
- Q. So was there some sort of friction that developed between you and the Shell Company following the controversy over the Spotswood-Ruddle application?

A. Yes. They did some work for patent purposes, the Shell Company did some work at the Martinez laboratory, and the Shell Development Company, also, which they told us was for patent purposes, and got out a patent application, and it covered the ovens that were free of gas, and also the workable limits of the solution, the Ruddle Solution, and, I think, sodium silicate was in the application. The application was submitted in the name of Spotswood and Ruddle, and the application was sent to our office for my signature, together with an assignment for me to sign and turn over my interest that I might have in it to the Shell Oil Company.

Mr. Aurich: Q. You mentioned the fact that sodium silicate was in the application. What do you mean by that?

A. I think they placed sodium silicate—if I remember right—that is, not the application; pardon me, maybe it is. That is not the patent that—

Q. No, I understand it is not in any patent. What I am driving at is, was any mention made in the application for the Spotswood-Ruddle patent that sodium silicate and asphalt alone could be used to make satisfactory cores?

A. As I recall it did, and also embodies the Ruddle Solution in the——

Q. Let's take one thing at a time, so there can be no confusion. The controversy that existed between you and Shell regarding the [944] Spots-

wood-Ruddle application was settled to your satisfaction, wasn't it?

- A. Yes. They agreed to bring it under the contract.
- Q. Yes, they gave you what you thought you were entitled to?

 A. That's right.
- Q. I am not here attempting to question their decision in that matter at all. My point simply is this, that in this application, among other things was mentioned a satisfactory core could be made when you use a core oil consisting only of sodium silicate and asphalt; is that right?
 - A. As I recall, the application said that.
- Q. Did I understand you also to say that that could not be done?
- A. Well, that is my statement, that in that respect it wouldn't make a good core; that is, because it would draw moisture. A core would be made all right, but they couldn't keep it. That was our experience with it.
- Q. You signed this application as one of the joint inventors, didn't you?

Mr. Hackley: The application speaks for itself.

The Witness: Yes, I signed it.

Mr. Aurich: Q. You swore to it at the time you signed it?

- A. Yes, I guess I did.
- Q. I call your attention to the first sentence at the top of the first column, page 2, "Our preferred core-making composition consists essentially of

sand, an aqueous solution of a water soluble alkali metal silicate such as commercial water glass, and a bituminous material such as asphalt." I ask you to read it. Is it your testimony now that that is an untrue statement?

- A. Yes, I would say that that would draw moisture. If you would put it into a place where it was damp I would say that core would draw moisture; that was our experience. [945]
- Q. That statement I read to you, taken from the Ruddle-Spotswood patent No. 2,214,349, is untrue?
- A. Well, that is my statement, if you put it in a damp place it would draw moisture.
- Q. Is the statement appearing in the first sentence of the first column on page 2 of yours and Spotswood's patent No. 2,214,349 true or false?
 - A. I would say it is a false statement.
- Q. Did you raise any question to that statement being in the application at the time it was presented to you for signature?
- A. I don't even remember—I read it over but I don't even remember that part of it; that is, I remember they were asking for an application for patent.
- Q. Did you raise any question concerning the fact that they had apparently been experimenting with sodium silicate and asphalt emulsion?
 - A. No, I don't recall that I did.

- Q. You apparently must have known that they were so experimenting?
- A. Yes. I told them at the time when we talked about sodium silicate, McSwain told me in his office one day that he had some cores in his office, about six or eight cores in his office one time, and he said those were made, part of them were made out of Ruddle Solution and part were made out of straight sodium silicate.
 - Q. How did the cores look to you?
- A. They looked all right in his office, couldn't tell them apart. [946]

Mr. Aurich: Q. I understand you want to make some comment, Mr. Ruddle, concerning Defendants' Exhibit R.

- A. No, but I—
- Q. Do you want to make some comment concerning it?
- A. No. I was trying to fix the time when Mr. McSwain made the statement to me. Instead of being the time the contract was signed it was after that Shell exercised their right to go ahead under the contract, it was six months after the contract was signed, and they had a month even after that.
- Q. That would be about November, October or November, 1938?
 - A. Yes, possibly within a month after that.
 - Q. Did you start to press him for action?
 - A. Yes.

Q. And he started to tell you it would be ready in approximately a week or ten days?

A. Yes. It just occurred to me that that is after the time of the start on that.

Mr. Hackley: That activity started when, about the first of 1939?

A. That letter was on December 9.

Mr. Aurich: Q. Well, let's figure it out from a mathematical standpoint. The contract was signed April 8th. You say they exercised their option finally in six months.

A. Seven months.

Mr. Hackley: November 8th.

Mr. Aurich: Q. That would be November, then, of 1938, that they finally exercised their option to proceed?

A. That's right. It was sometime after that that we started pressing Mr. McSwain about getting some action on the sale of the Core-Min-Oil.

Q. Prior to that time you had not pressed him at all? [947]

A. No. As I recall, it was after they exercised their option.

Q. If I understood your former testimony correctly, Mr. Ruddle, your relationship with Shell was quite friendly and cooperative up until the time the controversy started a rage concerning this Spotswood-Ruddle application?

A. That's right.

Q. Did the attitude on the part of the Shell

Company change after that controversy was settled? A. Yes, it did.

Q. In what respect?

A. Well, I wasn't invited to go to the foundries any more. Mr. McSwain used to report to me all the time when I would go there, but they never took me to the foundry. I don't think I was ever at Martinez after that.

Q. Do you recall when the controversy concerning this application we have been talking about was finally settled?

A. I think probably in December of—what's the date of that letter?

Mr. Hackley: This letter, Exhibit R, is that what you refer to?

The Witness: I think it was just probably after that letter.

Mr. Hackley: There are other letters available.

Mr. Aurich: I know there are, and if you have any available that will fix the date of the time of the start of the conversations, and when they were concluded you might give us the date for the purpose of the record. I am only seeking to get the date.

Mr. Hackley: I understand the controversy was settled—Mr. Gratama, on November 15, 1938, wrote Mr. Ruddle, referring to the drafting of a new application, which was sent Mr. Ruddle sometime before for his signature, and so forth. That would indicate that the discussions started prior to November 15, 1938.

Mr. Aurich: Sometime in November, 1938. [948]

Mr. Hackley: Incidentally, Mr. Gratama entitled the letter, "New Application Spotswood-Ruddle A4127," which I understand was the Shell file number on it. January 20, 1939, I find Spotswood-Ruddle Application was sent to Shell Oil Company by our office on behalf of Mr. Ruddle.

Mr. Aurich: Q. During this period from April, 1938, until November, 1938, when the Shell Company was, as you say, friendly, do I understand that they would invite you to go over to Vulcan?

- A. Yes. I went with Mr. Waller. Mr. Waller would get a machine and take me over there quite often with him to see how they were getting along in the development.
- Q. Were you doing any of the development work at that time?
 - A. No, not at that time, no.
- Q. Did you do any development work after that time? A. No.
- Q. And up to the time that Shell wrote you the letter saying they were not going to have anything more to do with the contract?
 - A. No, I didn't.
- Q. Following the culmination of the controversy about the Spotswood-Ruddle application in January, 1939, then, as I understand your testimony, Mr. Waller no longer invited you to go over to the Vulcan Foundry?
 - A. If I recall, Mr. Waller was sent up to Se-

attle, anyway, somewhere in there, about that time.

- Q. Do you know if there was anyone in the main office of the Shell Company here in San Francisco that was assigned to take Mr. Waller's place?
- A. Mr. Spiri was, I think, the one. I don't know the day he started to work on it, but he did work on it.
- Q. Did anyone on behalf of the Shell Company tell you you couldn't go over to Vulcan Foundry?
 - A. No, they didn't.
- Q. Did you ever go over to the Vulcan Foundry after January, 1939, [949] to observe what was going on? A. Yes, I did.
 - Q. Many times? A. No, just a few times.
 - Q. When were those times?
- A. The date of the first time was when I went over there, I took a can of core oil, core covering, a core wash, I think you called it, over to the Vulcan Foundry, and left it for Mr. Spotswood, and I cannot give you the date of that, but it might be in my notes.
- Q. Was that the only time you went over there to the Vulcan Foundry after January, 1939?
- A. No, I went over later, I remember. I think it was, I couldn't give you the date, but I am sure my notes there would show the date.
- Q. Well, did you have any conversation with the Shell Company, or any of its employees, between April 8, 1938, and October 8, 1938?
 - A. What is that?

Mr. Aurich: Will you read the question, please? (Question read.)

- A. You mean regarding the patent?
- Q. Anything, disagreement of any sort.
- A. Yes, we did, over the Spotswood application.
- Q. No. We are perhaps slightly confused, due to the fact I have the wrong period of time. The Spotswood application controversy arose, as your counsel, Mr. Hackley, just advised us, around November, 1938.

 A. Oh, you mean prior to that?
- Q. Yes; the date the contract was signed, up until October 8th, 1938, did you have any talks?
 - A. No, I have no recollection of any.
- Q. Did you have any disagreement with Shell, or any of its employees before April 8, 1938?
 - A. No.
- Q. Between October 8, 1938 and the time that Shell exercised [950] the contract the only disagreement you had with them was the Spotswood-Ruddle application, and your contention that they had no right to cancel the contract?
 - A. That's right.
 - Q. No other disagreements that you can recall?
 - A. No.
- Q. Now, let's come to the time that Shell wrote you the letter and said they were going to cancel the contract: Can you tell us some of the circumstances, as you know them, leading up to your receipt of that letter?

A. Yes. I remember being in Mr. McSwain's office—

Q. Will you tell me who were present, please?

A. Just Mr. McSwain, as I recall, and he told me that it didn't look so well for Core-Min-Oil. I think that is the way he started his conversation. He said Shell had been able to do the same thing with sodium silicate and also that they had developed a new core oil which was made up of, he didn't attempt to give me proportions of anything, but he just said generally it was made up of an albino asphalt and some form of linseed oil; he didn't tell me the proportions, or how they were mixed, but he said it was an excellent core oil, and that it had all the good qualities of linseed oil, and it had the equal drying time of the Core-Min-Oil, but the Patent Department had told him they couldn't get a patent on it, and, therefore, it was just another core oil, and he said "They will probably ask you people to take your contract back." I said, "Well, I'll have to talk to Mr. Peck and Lydell Peck about it and see what they say about taking back that contract after you have had it all this time." And he said, "Well, I wish you would talk to them and let me know what they say."

So I went back to Mr. Peck's office and discussed it with Mr. Peck and Lydell Peck, and they said, "We certainly will not take back the contract after being tied up all this time and let [951] the Shell Oil Company develop something for them-

Defendants' Exhibit DDD—(Continued)
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selves and hand us back ours to take all the market." That was their answer to me, and the answer I reported to Floyd McSwain.

- Q. At this meeting did Mr. McSwain tell you the Shell Company was going to go ahead with the manufacture and sale of this new core oil you spoke about?

 A. No, he didn't.
- Q. At the time of this conversation did Mr. Mc-Swain tell you any of the difficulties that they had encountered with your Core-Min-Oil that they had not been able to overcome?
- A. He said they had spent some \$10,000 on it. I said, "Yes, but you promised me many times that you would sell it in two packages if you couldn't get it in on one package." But he said, "Well, I am just reporting the orders that I get."
- Q. In other words, the only difficulty that he told you they had encountered with your Core-Min-Oil was the fact that they had to sell it in two packages?
- A. Oh, yes, that is what he told me that is what they had spent their money on, trying to put it in one package.
- Q. Did he tell you of any other difficulties that they had encountered and that they had not been able to overcome?
- A. Well, he said—Yes, I believe he did say generally that there were some objections to ours. Anyway, the company had decided not to sell it.

- Q. Well, do you recall what those objections were?
- A. Yes, I think he said they had taken some down to a foundry in Los Angeles by the name of Axelton, and he said when it arrived there it arrived there all lumpy, and that Mr. Axelton refused to use it. So I said to him, "Well, that was in one package, wasn't it?" He said, "Yes, that was in one package." I said to him, "Did you try to send it down in two packages and [952] have Axelton try it?" He said, "No, we weren't interested in that."
- Q. Did he tell you that Shell had overcome the difficulty of the CO₂ gas problem?
 - A. Did he tell me at that time?
 - Q. Yes.
- A. I don't think he did, because I had known about it many months.
 - Q. You mean they knew how to overcome it?
 - A. By changing the ovens, you mean?
- Q. Yes. Was that the only way you could overcome the problem of the CO₂?
- A. That is the only way I know of is to have a gas-free oven, or have a cover for the core to keep the gas away from it.
 - Q. That is still true, to-day?
 - A. That is still true today.
- Q. In other words, you could find no ready market for your Core-Min-Oil unless you found foundries that had gas-free ovens?

- A. Yes, unless the ovens are fixed for it.
- Q. Did you ever discuss with Mr. McSwain the expense and problem of educating the foundries to change their equipment to gas-free ovens?
 - A. Yes, to some extent.
 - Q. Do you recall when that discussion was?
- A. Well, at different times, he told me he had some engineer working on the problem.
- Q. How was that going to be arranged between you and Shell, was Shell to undertake the expense of changing all the foundries in the United States that were using direct fired ovens over to indirect fired ovens?
- A. No, that was not discussed, where Shell would attempt that expense, attempt to assume that expense, but it was discussed as to what it would cost foundries to make those changes, and the amount.
 - Q. You don't recall what the amounts were?
 - A. No.
- Q. As I understand your testimony, to summarize it, when Mr. Mc- [953] Swain advised you that the company was going to turn the contract back to you the only objectionable feature of your Core-Min-Oil that he mentioned was Shell's inability to place it into a single package or make a ready-to-use core oil out of it; is that right?
- A. Yes, as I recall it, that was the reason he gave me.

- Q. He didn't mention anything about friability?
- A. No.
- Q. He didn't mention anything about strength?
- A. No, there was nothing said about that.
- Q. He didn't mention anything about Shell's inability to overcome the sticking in the core boxes?
- A. No, I don't recall that he said anything about that.
- Q. He didn't mention anything about the fast drying of the sand on the bench?
- A. No, because we knew how that could be overcome, by containers that were air-tight containers, to keep the air away from the solution.
- Q. Do you know what the general practice in foundries throughout the country is with respect to the method of keeping sand after it has been mixed with the core oil?
- A. Well, I wouldn't think if it was put on the market that you would try to market it like that, the core oil like that. I would think you would have to make the foundries fit the core oil rather than make the core oil fit the foundry.
- Q. I don't quite understand your last answer. What do you mean when you say "make it fit the core oil"?
- A. Well, if the core oil required that the material be kept in an air-tight container you would have to have air-tight containers for it.
- Q. And if the foundry didn't care to go to the expense and trouble of providing air-tight con-

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(Deposition of Allan B. Ruddle.)
tainers you would not be able to sell your core oil

to that particular foundry? [954]

- A. No, if this didn't have advantages, if you couldn't show them an advantage where it would pay them to fix their foundries to fit this core oil you couldn't sell it to them.
- Q. I would like to have you answer the question for me now, do you know whether the majority of foundries in the United States keep their core sand, after it has been mixed with the core oil, do you know how they do that?

 A. No, I don't.
- Q. Have you ever made a survey of the number of foundries in the United States?
- A. Well, we did try to get from the Department of—the Government, we tried to get a list of them, and we also have a letter from the Foundry Magazine, which is one of the leading magazines on the subject, and, if I recall, the number of foundries in the year in which we had it was about 5000 foundries in the United States.
- Q. You say "we". Do you mean by that you and Mr. Lydell Peck?
- A. Well, I mean Mr. Lydell Peck, and Mr. Waller, and Mr. McSwain, and, I don't know, he had somebody with the Shell Oil Company he was trying to have get the information.
- Q. Who actually attempted to get the information for you?
- A. Lydell Peck wrote to the "Foundry," I think he signed the letter.

- Q. In other words, before you went to Shell you had made no survey of the number of foundries in the United States?
 - A. This was just prior to taking it over to them.
- Q. In other words, prior to taking your Core-Min-Oil to Shell you had written letters to the Government and to the American Foundry Association in an attempt to find out how many foundries there were in the United States? A. Yes.
- Q. The reply you received was approximately 5000, as you recall it? A. As I recall.
 - Q. Do you recall when that request was made?
- A. No, but just [955] prior to going to Shell; I don't know just what date.
- Q. Well, it would be sometime, I presume, after you had perfected your Core-Min-Oil?
 - A. Correct.
- Q. Do you know the number of foundries that are located on the West Coast?
 - A. A very small number, I know.
- Q. Do you know the number of foundries that are located in the Middle West, and the East?
- A. The principal foundries are located in the Middle West and the East.
- Q. Do you know the percentage of foundries in the West, or how the percentage of foundries in the West Coast compares with the percentage of foundries in the Middle West and East, in so far as volume is concerned?
 - A. It is principally in the East, I know that.

- Q. The percentage of foundries on the West Coast is very small compared to the total number of foundries in the United States?
 - A. That is true, yes.
 - Q. That is also true with respect to size?
 - A. That's right.
- Q. Are there any large foundries on the West Coast? A. None that I know of.
- Q. Where was it contemplated by you that the greater part of your Core-Min-Oil would be sold?
 - A. In the Middle West.
- Q. Did you ever make a survey of the foundries in the Middle West to determine the amount of Core-Min-Oil that you could sell there?
 - A. No.
- Q. Did you ever have anyone make such a survey for you?
- A. No, only after discussion with the Shell Company.
- Q. Before going to Shell had you made any such survey?
- A. No, only just knew the total amount of core oil that is used.
- Q. I want to know if you ever made a survey, or if anyone else made one for you, to determine how much Core-Min-Oil you could [956] sell, not how much linseed oil had been sold?

 A. No.
- Q. To your knowledge, did Shell ever make a survey of the foundries in the Middle West to de-

Defendants' Exhibit DDD—(Continued)
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termine how much Core-Min-Oil could be sold

termine how much Core-Min-Oil could be sold there?

- A. No, I don't know of any, only that Mr. Mc-Swain told me they were doing that.
- Q. Do you know the percentage of foundries in the United States that are using indirect fired ovens? A. No, I don't.
 - Q. Have you any idea? A. No, I haven t.
- Q. Have you ever made an investigation to determine that fact?
- A. I talked to the representative of Westinghouse, I think, Mr.—that has been recently, and he said they had a good many large ones.
 - Q. What?
- A. Several large ones, foundries, and quite a few small ones that were heated by electricity.
 - Q. How recent was this inquiry made?
 - A. That has been within the last year.
 - Q. What was the gentleman's name?
 - A. I haven't his name.
- Q. Was it the Westinghouse office here in San Francisco?
- A. I think it was a representative from the East who was out here.
- Q. If it was not practical or expedient, or too costly for a foundry to change from a direct fired oven to an indirect fired oven you would be unable to sell your Core-Min-Oil to that particular foundry?

 A. That's right.
 - Q. We have referred quite frequently to Mr.

James F. Peck. That is the father of Lydell Pack, one of the plaintiffs in this case?

A. Yes.

- Q. He was an attorney at law in this City?
- A. He was.
- Q. And he enjoyed quite an enviable reputation?

 A. Yes, he did.

Mr. Hackley: You might bring out there he passed away when, Mr. Ruddle? [957]

The Witness: October, 1939.

Mr. Hackley: How old was he then?

A. He was 79.

Mr. Aurich: Q. Did you have any benefit of legal counsel at the time the contract with the Shell Company, which is here in controversy, was entered into?

- A. Mr. Peck was the only one that we had there.
- Q. Well, did you have any benefit of legal counsel at the time, or did you not?
 - A. Yes. Mr. Peck.
- Q. You had worked for Mr. Peck for quite some time, hadn't you? A. Yes, in his office.
 - Q. You had done some research work for him?
 - A. I had.
- Q. You were quite familiar, in a general way, with certain matters of law, at least?
 - A. Yes, he had water litigation in his office.
 - Q. Did you ever study law? A. No.
- Q. Do you know whether Mr. Lydell Peck ever studied law? A. Yes, I think he did.

- Q. Where?
- A. Back at Washington and Lee University, I think, but he never practiced law.
- Q. Mr. James F. Peck assisted you in the conferences concerning this contract?
 - A. Yes, he was there all the time.
 - Q. He sat there and counseled with you?
 - A. Yes, that's right.
- Q. Advised you as to your rights, and what should be done, and should not be done, from the legal standpoint? A. That's right.
- Q. I want to call your attention, then, to a letter dated September 6, 1939, which you and Mr. Lydell Peck wrote to Shell Oil Company, and particularly to the first paragraph, second page, the second sentence, in which you state: "We might add, as you were informed, at the time we entered into the contract [958] without benefit of counsel." That statement was not quite accurate, then, was it?
- A. Well, the explanation of that is Mr. Peck was ill, very ill, at the time, and we didn't consider we had counsel there.
- Q. You thought he was rather weak to act for you?
 - A. Yes, he was; he really was.
- Q. But you still had him present at your conversations?
 - A. Yes; you couldn't keep him away.
 - Q. You followed his advice? A. Yes.

- Q. He suggested that something be added to the contract, what was it, proof, ratification, something you mentioned in your testimony? A. Yes.
 - Q. A resolution. Did you get that resolution?
 - A. Yes, that was put on that contract.
 - Q. In other words, you did follow his advice?
 - A. Yes.

Mr. Hackley: Would you find out if Mr. Ruddle means by "resolution"—he said he put it on the end of the contract. Would he identify whether or not that is the little subscription clause that appears on the last page of the contract? He may mean something else for ratification than you and I mean.

The Witness: It was a resolution authorizing the Secretary to sign the thing.

Mr. Hackley: Do you see that on the document? Mr. Aurich: Well, you look through there and see if you can tell me what you had in mind.

- A. It is not here, the thing I refer to.
- Q. Was it attached to the original contract?
- A. Yes, it was attached to the original contract.
- Q. So that at least in that respect you followed Mr. James F. Peck's advice, and thought that it was worth while following, is [959] that right?
 - A. That's right. [960]

Mr. Aurich: Q. Did you make any endeavor to refresh your recollection as to the events, sequence of events, or conversations you had with representatives of Shell over the week-end, Mr.

Ruddle? A. No, I didn't have a chance.

- Q. You didn't review any notes or any memoranda or other documents?
 - A. No, I didn't.
- Q. By the way, in your previous testimony you mentioned something about a Watson invention, or Watson patent? A. Yes.
- Q. Which contained sodium fluosilicate, sodium silicate and aluminum sulphate?
 - A. That's right.
- Q. That patent had issued long prior to the commencement of your negotiations with the Shell?
 - A. That's right.
- Q. Did you ever meet a man by the name of Spiri? A. Yes, I did.
- Q. And he was employed by Shell at the time that you first met him? A. He was.
 - Q. Can you tell me when you first met him?
- A. I wouldn't know the exact date, but it was, there had been a great many tests that had been made by Spotswood before Spiri came into it, as I remember.
- Q. Did you have many conversations with Mr. Spiri? A. No, not very many; just a few.
 - Q. Just what? A. Just a few. [961]
- Q. Did you work with him, or were you just observing the work that he was doing?
 - A. I didn't do either.
- Q. Would be report to you as to the results, if any, of his work?

- A. He did once or twice, I think. I talked to Mr. McSwain, I think, most of the time, as Mr. Spiri was working on it.
- Q. Can you recall at the time any conversation that you had with Mr. Spiri?
- A. I don't remember the details of the conversations I had with him, but I talked with him at his office in the Shell Building, I remember that, at Mr. McSwain's request. Mr. McSwain was going out of town and he asked me to go and see Mr. Spiri while he was away, and I went to his office in the Shell Building at the time; I don't recall what happened at that time.
- Q. You can't recall anything of the conversation?
- A. No, only just talking to him about what he was doing generally; principally about fixing ovens, as I recall, to change the ovens.
- Q. What was the purpose of wanting to change the ovens?
- A. So they would be indirect fired ovens in the foundries.
- Q. That was so you could eliminate the trouble that was caused by the presence of the CO₂ gas?
 - A. That's right.
- Q. Do you know how much percentage of CO₂ gas would affect your Core-Min-Oil so that you couldn't get good constant cores with it?
 - A. No. I remember reading such a percentage

in one of the Spotswood reports, but I wouldn't be able to tell you that from memory.

- Q. You don't recall what percentage was there given?
 - A. No, I don't recall what it was.
- Q. Outside of this one conversation which you recall with Mr. Spiri in his office in the Shell Building, do you recall any other conversation you had with him?
- A. Yes. He came over to Mr. Peck's office one day and was there for a little while. [962]
 - Q. Who was present at that conversation?
- A. I don't recall who there was. There might have been somebody else there, but I don't recall who was there at the time.
- Q. Do you recall anything about that conversation?
- A. No, I don't, only just talking generally about it.
 - Q. Generally about your core oil?
 - A. That's right.
- Q. Did Mr. Spiri, at either one of those two conversations, tell you what he was working with in the way of ingredients?
- A. No, I don't think he did. I remember that I brought up the subject of a core covering with him, and he said that the results of a test that he had run on this core covering, or core wash, was satisfactory—were satisfactory; I remember that,

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(Deposition of Allan B. Ruddle.)
but that is about all I remember in that conversation.

- Q. If I understand you correctly, you are unable at this time to fix the date of either one of those conversations with Mr. Spiri?
- A. No, I couldn't. It might be in some of the notes that I wrote, but I have not looked at them.
 - Q. What notes would those be, Mr. Ruddle?
 - A. These notes that are on yellow paper.
- Q. The notes on yellow paper, Exhibits A to H, that you produced on the first day of your deposition?
- A. Yes; there might be something in there about it. I haven't examined them to see.
- Q. During any of your conversations with Mr. Spotswood did he indicate what ingredients he was using to make the core oil?
- A. No, not that I recall—that Spotswood told me? No, I can't recall that Spotswood told me he was using anything other than the Core-Min-Oil.
- Q. Did anyone from Shell ever tell you the ingredients they were using in their endeavor to perfect your Core-Min-Oil?
- A. Well, Mr. Waller told me at one time that they were trying other [963] things.
- Q. Did he tell you what other things they were trying?
- A. No. He said Shell Development Company had here a number of samples that they had taken over to the foundry, and I saw the cores that they

had made from them. I understood there were some of them sodium silicate. I don't know just what there was in them; he didn't tell me.

- Q. How did the appearance of those cores compare with similar cores made with Core-Min-Oil?
 - A. I couldn't tell them apart.
- Q. So far as you could see from your observations they were alike? A. Yes.
 - Q. And equal, one to the other?
 - A. Yes; they seemed to be perfectly good.
- Q. You will recall that on Friday we were discussing the conversations that led up to, or surrounding the time that Shell wrote you a letter in which they stated they were cancelling the contract. You recall we discussed that on Friday?
 - A. Yes.
- Q. I believe you mentioned that you had a conversation with Mr. McSwain at his office and he told you several things, and concluded with the statement that Shell was going to cancel the contract, and you said you wanted to go back and talk it over with the two Mr. Pecks and see what their reaction was?

 A. That's right.
- Q. And thereafter you went back and talked with the two Mr. Pecks and you concluded that it was not satisfactory and you were going to resist Shell cancelling of the contract? A. Yes, I did.
 - A. That's right.
- Q. Did you subsequently visit Mr. McSwain again and have more discussions relative to the

Defendants' Exhibit DDD—(Continued)
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canceling of the contract? A. Yes, I did.

- Q. Now, between the time that you left Mr. Mc-Swain's office for the [964] purpose of discussing Shell's attitude with the Messrs. Peck, and the time of your next visit with Mr. McSwain, did you discuss Shell's attitude with anybody else?
 - A. I don't know what you mean.
- Q. Mr. McSwain had advised you Shell was going to cancel the contract; you went back and reported that fact to both Mr. Pecks?

 A. Yes.
 - Q. And you had discussions about it?
 - A. Yes.
- Q. Did you discuss Shell's attitude, that is, their desire, or expressed purpose of cancelling the contract with anyone else other than the two Mr. Pecks?
 - A. I think I discussed it with Mr. Hackley.
- Q. Was there a discussion with Mr. Hackley before you next saw Mr. McSwain, or after you next saw Mr. McSwain?
- A. No, I think that was—as I recall, I went back to the office that evening and talked to Mr. Lydell Peck and James F. Peck, and that evening I called McSwain at his home and told him their reaction, and the next morning when I came down to Mr. Peck's office, I think I went in and talked to Ray Hackley about it.
- Q. Following this conversation with Mr. Hackley when did you next see Mr. McSwain?
 - A. Well, I don't remember the day, but I think

it is on one of the notations there that I made; I went to lunch with McSwain, and when I got back from lunch I think I wrote the conversation that I had with Mr. McSwain

- Q. Who made the luncheon appointment?
- A. Well, I called him up, but I think he asked me to come over at lunch time, so we went to lunch together. I don't remember which one of us asked about it.
- Q. At that time you then reported to him the result of your conference with the Messrs. Peck, and also with Mr. Hackley?

 A. I think so. [965]
- Q. Can you give us the substance of that conversation?
- A. Well, I haven't looked at it so I don't remember it, but if I could see those notes I could.
- Q. Well, I would like to have you give it from what you recollect, without refreshing your recollection from the notes, just as much as you can.
- A. Well, I could do a better job if you would let me look at the notes.
- Q. We will get to the notes a little later. I am merely trying to exhaust your independent recollection first.
- A. Well, I went to lunch with Mr. McSwain and during the lunch—I don't know that I can make this sound like anything——
- Q. Well, did you tell him what you talked of with Lydell Peck and James F. Peck and Mr. Hackley?

- A. Yes, I told him that; I told him it was a shock to all of us to think that after all this time, that we were to find out that Shell Oil Company was now going to hand this back to us and not market it, and I reminded him of the fact that he said they would sell it in two packages, and he said, "Well, the company has decided not to go any further with it."
- Q. At this conversation at the lunch with Mr. McSwain did you ask him what was going to happen to the reports of all the work that they had been doing during the period of time they had been working?
- A. Yes; I think he told me they were going to send us reports of the work they had done.
 - Q. Did they subsequently send you such reports?
 - A. Yes, we did get some reports.
- Q. Are those the reports that are attached to the complaint in this case?

 A. That's right.
- Q. Are those all of the reports in writing that you have received from the Shell Company, or any of its representatives, concerning [966] work done by them on the core oil?
 - A. Yes, that's right.
- Q. Without referring to your notes, can you give me any more information concerning the conversation that you had with Mr. McSwain at this lunch?
- A. Well, I remember telling him at this lunch that I felt that if the Shell Oil Company developed

Defendants' Exhibit DDD—(Continued)
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anything out of this work and we were left out of it
I would always feel that I had been robbed. I
remember that took place at that conversation.

- Q. What did Mr. McSwain say to that?
- A. I don't recall just what his statement was to that.
- Q. Can you recall now any statement at all that Mr. McSwain made at that lunch?
- A. I think he said at that lunch that they would want to return it all to us together with all the data, that we would have the benefit of all the work that they had done.
- Q. Did Mr. McSwain tell you who was responsible for the decision not to proceed any further with the manufacture and sale of core oil?
 - A. I think he just said the company.
- Q. Did Mr. McSwain indicate to you that the Shell Company was not going to go into the manufacture of any core oils?
 - A. No, I don't think that he did.
- Q. Did he indicate to you that they were going ahead with the manufacture of any core oil?
- A. No, I don't think he said anything about that.
- Q. Do you know whether or not the Shell Company has, since the date of the cancellation of the contract, gone into the manufacture and sale of any core oil?

 A. No, I don't.
- Q. Do you know of any core oil manufactured by the Shell Company that has been placed on the

Defendants' Exhibit DDD—(Continued)
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market since the data of cancellation of your

market since the date of cancellation of your contract? A. Not to my knowledge.

- Q. Do you believe you have sufficient knowledge and experience in foundry practice to be able to state the desired and necessary [967] qualities of core oil?
- A. Maybe not all of them, but at one time I thought I knew enough about them.
- Q. Will you give me a list of what you consider to be the necessary and desirable qualities of a good core oil?
- A. Well, a core oil should be able to dry the fastest possible time; that is one. Maybe I don't understand your quetsion.
- Q. That's all right. I don't understand what you mean by drying. By that do you mean baking?
 - A. Yes.
- Q. In other words, a good core oil will take a short baking time?
- A. Well, I guess I don't understand your question.
- Mr. Aurich: Will you read the question to the witness, please?

(The question was read by the reporter.)

A. Well, a core oil should have sufficient strength if it is to make a good casting: it should be friable so it will pour out of a casting; it should be as friable as possible with castings; it should be porous so the gas can pass through it and not explode, causing blow-holes and bubbles. I would say that those

Defendants' Exhibit DDD—(Continued)
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are the principal things that you should be able to
do with a core oil.

- Q. Those are the principal ones?
- A. Yes; I think so.
- Q. Can you name any others?
- A. Well, fast drying would be desirable.
- Q. I don't understand just what you mean by "fast drying."
- A. Well, fast baking time would be an advantage in core oil. That is all I recall. Those are the principal things, I think, in a core oil, a core oil where you can eliminate a lot of ingredients that they have to add to it to keep it up in shape; I think that is another one of the advantages.
 - Q. Is that all you can recall at the present time?
 - A. Yes, that is the principal thing, I think.
- Q. Do you know whether a foundry man desires a core oil that is [968] slow drying in that air room temperature?
 - A. I wouldn't know.
- Q. Do you know whether or not it is a desirable quality of a core oil that it should be free and easy to mix with the sand and have uniform distribution, that is, that the oil must not have a tendency to draw the surface of the core?
 - A. Yes, I think that would be desirable.
- Q. How about the immunity of the core to weakening through the reaction of CO₂ gas?
 - A. That would be necessary.
 - Q. You would want a core that would not react to

the CO₂ gas? A. Yes. You are speaking—

- Q. I am speaking only of while the core is be-A. Yes, that's right. ing baked.
- Q. Do you know whether it is a desirable or undesirable characteristic of a core oil to have one that has a lack of stickiness which might cause gumming of the core box?
- A. That would depend whether or not you could overcome that by the addition of dusting powder. You can take a core, and without the use of dusting powder it might stick, where if you use dusting powder of a certain character on it, maybe it won't stick. But that last question just before this one, I don't know whether my answer was complete or not.

(The record was read to the witness by the reporter.)

The Witness: That part about the gas, you mean in a gas-contained oven; that is what you meant by that, I take it?

- Mr. Aurich: Q. Well, I mean just speaking generally, a foundry man wants a core oil that has an immunity to weakening through the reaction of CO2 gas?
- A. Well, if he had a gas-free oven it wouldn't make any difference. Maybe I didn't understand what you meant. [969]
- Q. If he had no gas-free oven what would you say about the desirable characteristics of a core oil in the respect which I last mentioned?

- A. Yes, then it would be affected by the gas.
- Q. And the foundry man would want a core oil that had the immunity to weakening through reaction of the CO₂ gas?
 - A. Yes, that's right.
- Q. You think the sticking to the core box of a core sand, after it has been mixed with oil, is not an important factor?
- A. Not if you can use a dusting powder like lachapodium; that is one of their dusting powders.
- Q. With the use of your Core-Min-Oil how often would they have to dust the side of the core box in order to prevent the sticking or gumming?
- A. I would say maybe not every time they fill the core box, but then every few times, anyway; two or three times.
- Q. Do you know of any foundries today that are using dusting powder to prevent stickiness occurring in the core box?
 - A. Yes; every one that I have been to have.
 - Q. That is Vulcan, Kingwell, and McCauley?
 - A. Yes, they have.
- Q. How about the resistance to moisture of a core, either in the mold or in storage? Is that an effect that has to be taken into consideration in the determination of a good core oil?
- A. Well, that, of course, would depend upon when you are going to pour the castings. A core made out of sodium silicate and asphalt emulsion, if you should make the core and bake it, immedi-

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
ately cook it, it would make a good core, but if you had to put a core in storage, no doubt the sodium silicate and asphalt emulsion would draw moisture, soften up.

- Q. Suppose instead of using sodium silicate we used the so-called Ruddle Solution and asphalt emulsion?
- A. Our experience was that it wouldn't draw moisture. [970]
- Q. Well, if you were selling a core oil to foundries generally, would you consider that you had a good core oil if it would not resist moisture either in the mold or in storage?
- A. I would say if it did draw moisture in storage it would limit its use.
- Q. It would have a very limited field of application, would it?
- A. Yes; for that part of the foundry work I would say it would be limited.
- Q. Did you ever measure the resistance of cores made of Core-Min-Oil to moisture?
 - A. Only tried it in their storage racks.
- Q. Is that the same sort of test or observations that we discussed the other day?
 - A. That's right.
- Q. How about the tendency of a core to swell or crack during baking, storage, or pouring; do you want a core oil that will prevent that tendency or a core oil that will enhance those tendencies?
 - A. Prevent that tendency.

- Q. I think you answered the other day you didn't know what was meant by the green strength of a core sand.

 A. That's right.
- Q. How about the adhesive qualities of a core oil; do you want one that has good adhesive quality, or one that does not have good adhesive quality?
 - A. Good adhesive quality.
- Q. Do you know what is meant by the flowability of a core sand? A. No.
 - Q. You never heard that expression before?
 - A. No.
- Q. So you would not know whether it was a desirable or undesirable characteristic to have a core sand that had good flowability?
 - A. No, I wouldn't know.
- Q. Do you have a sufficient knowledge and experience in foundry practice to be able to tell the length of time that cores must remain hard and usable?

 A. You mean after they are baked?

[971]

- Q. Yes.
- A. Well, they store them for months, at times.
- Q. Do you have sufficient knowledge and are you sufficiently experienced to be able to state the ratio of sand to oil employed by foundries using, say, Linoil?

 A. Not Linoil, no.
- Q. Can you answer that question with respect to linseed oil?
 - A. Yes; linseed oil is about from one part of

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) linseed oil to fifty parts of sand, to eighty parts of sand.

- Q. Do you have sufficient knowledge and experience in foundry practice to be able to state whether an indirect fired oven is as good for all practical purposes as a direct fired oven?
 - A. No, I don't know.
- Q. Do you have sufficient knowledge and experience in foundry practice to be able to state from the cost of operation standpoint which is the most economical type of oven to use, an indirect or a direct fired oven?
- A. I understand that the direct fired oven is the least expensive.
- Q. Do you have sufficient knowledge and experience in foundry practice to be able to state the best core oil which is now being manufactured and sold?
 - A. Well, that is always a matter of opinion.
 - Q. What is your opinion?
- I would say linseed oil would be the—that is only an opinion.
- Q. You think linseed oil alone is the best core oil that is now on the market?
- A. Well, I think it is recognized as the best core oil; however, that is only a matter of opinion.
 - I am merely seeking your opinion of this. Q.
 - Yes. Α.
- Well, do you know of any foundries that are using just linseed oil for making cores?

- A. Yes; the Vulcan Foundry is using just linseed oil as a core oil.
 - Q. Nothing has been added to it?
- A. Not as a core oil. When [972] they mix it with the sand they add other things to it. They put many things in it. I think there were as many as 16 different things, not all at one time, but for the other purposes.
- Q. You mean they added a number of things to the linseed oil itself?
- A. Yes; when they mixed it I saw them adding other things.
- Q. Will you name some of the ingredients to be added to the core oil?
- A. Yes. One was what they called a silicon. It is a kind of powder; that is one thing. They have what they call tux, which is a product of cornstarch; another thing.
 - Q. That was also a powder?
- A. That was also a powder. I don't recall the others by name. I remember them saying they had 16 different things; metal that they put in. They used a tack that was driven in the core after it is completed, and it is supposed to help chill the iron when it touches it, so it won't burn in.
- Q. Do you know who manufactured the linseed oil that the Vulcan Foundry was using?
 - A. No, I do not.
- Q. Did you ever hear of the Warner G. Smith Corporation?

- A. No, I don't know that I have; possibly.
- Q. Can you name the various core oils that were on the market at the time you started to work on your Core-Min-Oil?
- A. We did have a list of them at the time, but I don't know that I could recall all of them. I remember Houghton Oil, Linoil, linseed oil, Quandt Oil; those are the principal ones.
- Q. Do you recall the name of any core oil on the market other than those you have enumerated, that were on the market when you took your Core-Min-Oil to the Shell Company?
- A. Those are the ones I can recall offhand. We had a list of core oils.
- Q. My last question, Mr. Ruddle, was outside of that list that you had, do you recall those on the market, or any other core oils that were on the market when you took your Core-Min-Oil to Shell [973] in December, 1937?
 - A. Not at this time, I can't.
- Q. When did you get this list of core oils that you referred to a moment ago?
- A. I think at the time—after the Shell Company came out with—I think it is after the contract was drawn.
 - Q. Who obtained it?
- A. Well, I don't know. We did a lot of work with Mr. Waller in trying to find that out. If he is the one who got the list, I don't know.
 - Q. You don't know whether you got it, or some-

one from Shell got it, or whether Mr. Peck got it?

- A. No.
- Q. Can you tell me the method of making a casting in a foundry, from the time the sand and oil are sent to the foundry until the casting is ready for machining?
- A. I think I could; I have seen it done many times.
- Q. Will you describe the method for me, please, commencing with the mixing of the sand, right on through, up until the casting is ready for machining?
- Well, the sand is mixed at the machine where they do the mixing, and from there it is taken to the benches where the core makers operate. The core makers put the sand in the molds and then take out the plate and onto a truck that is wheeled into the oven, and there is a man who has charge of the ovens who keeps track of the time when they come out of the ovens, and they are allowed to cool, and they are taken out of the core boxes, and from there they are taken to the benches where they are cleaned up, and those that have to be put together are put together by paste, and then sandpapered; then they are taken to another department that puts a core wash, or a core covering, on them. From there they are taken to the people who put them into—I have forgotten what they call it, but it is where the casting is put—the hot metal is poured in that makes the casting, and that is generally [974]

done in the afternoon. The next morning they take them out of these molds, and from there they go into another department that cleans up the castings; then it goes through a wind tunnel, I believe, that they have, and then they go to these emory wheels to be cleaned up. That is generally the process that I have seen. It all depends on the type of casting. That is just the ordinary casting.

- Q. How are the cores made?
- A. You mean how is it molded in the box?
- Q. Yes.
- A. Well, the box that holds the core is turned face up, and the core maker starts building from there, starts with a little sand, and then the different parts of the core box that have to be added; as that is necessary, he merely adds it as he puts in parts of sand; and then, when it is all complete, these pieces that he has added to the core box come out first, and then it is taken to the fire after that. Is that what you mean?
- Q. Yes. You just answer the question. Did you ever hear the expression of "cope" and "drag"?
- A. Yes. That is added to take up the gas that is formed when the heat hits the core; that is generally put in the center of the core.
- Q. You mean the "cope" and "drag" are generally put in the center of the core?
- A. Yes, if that is what I understand what you mean by——

- Q. All I am trying to get is what you understand by the term "cope" to mean in foundry practice, particularly relating to the art of core making.
- A. Well, "cope" is put in; I know they use the cope to put in the center to take up the gas.
 - Q. That is c-o-p-e?
- A. Yes—wait a minute. I was [975] thinking about coke, c-o-k-e.
- Q. No. I wanted to know what is the meaning of the term "cope". What is the meaning of the terms "cope" and "drag" as used in the art of core making?
- A. I think one of them is the top of the core core box, and the other is the bottom of the core box.
 - Q. Do you know which is which?
 - A. No, I wouldn't know which is which.
- Q. Can you describe in a little more detail for us how the eastings are taken out of the molds?
 - A. How the castings are taken out of the molds?
 - Q. Yes.
 - A. You mean after the casting has been poured?
 - Q. That's right.
- A. Well, in the Vulcan Foundry they break them with hammers.
 - Q. How do they do it?
- A. They just take a hammer, or something, and break up the sand that forms the outside of the mold, and the casting rolls out on the ground.

- Q. What do they do with that part of the core that is left remaining in the casting?
- A. They tap it with a hammer, and it is supposed to pour out.
- Q. Is a core wash always used in the making of a casting?
- A. I understand some of them do not, where they don't require them to be smooth.
- Q. Are cores ever baked when they are not contained in a core box?
- A. Yes. They take them out of the core box, the core makers, and put them on a plate, and then they are set in the oven on a plate.
- Q. Do you have sufficient knowledge and experience in foundry practice to be able to state how the core oils that are on the market are sold? That is, in what type of containers are core oils usually sold?

 A. They usually are sold in drums.
 - Q. What size drums?
 - A. Fifty-gallon drums. [976]
- Q. Do you know whether the methods of marketing the core oils which are used in the foundries which you saw are the same as used generally throughout all foundries in the United States?
- A. No. I understand they are sold in tank cars. That is only hearsay.
- Q. Do you know how the core oil is delivered from the tank cars to its storage place in the foundries, or to the place where it is to be used?
 - A. You mean in the larger foundries?

- Q. Yes. A. No, I don't.
- Q. Did you give any consideration at all to how you were going to sell your Core-Min-Oil in tank cars, in view of the fact you did not have a ready-to-use core oil?
- A. I regarded the core oil ready to use after they found the oven had to be gas free oven.
- Q. Perhaps I can clear that up for a little. By "ready-to-use core oil" I mean what you mean when you say "single package"; in other words, a core oil that is ready to be used the minute it gets to the foundry, without having to be mixed with other ingredients, such as you having to mix your core oil at the foundry with asphalt emulsion and so-called Ruddle Solution. Now, with that explanation, will you please tell me if you gave any consideration to how you were going to be able to deliver your Core-Min-Oil to the foundries for use?
- A. No, I never gave it any thought, other than we discussed selling it in two packages, having asphalt emulsion in one container and Core-Min-Oil, or Ruddle Soluition, you call it, in the other.
- Q. That would be a case, then, where you would be supplying the foundry two tank cars filled with core oil, rather than one tank car, as had previously been used?

 A. That's right.
- Q. Had you given any consideration to how the foundries were going to deliver the core oil from the tank car to their place of [977] storage, or to the place that it was to be used?

- A. No, I don't know that we did.
- Q. That was not given any consideration by you?
- A. I think we talked about it with Mr. McSwain and Mr. Waller at times, but I don't recall only generally talking to them about it.
- Q. Do you recall how they were going to accomplish that fact? A. No.
- Q. You could see no difficulty in the fact you have to sell your core oil in two tank cars, as against the core oils that could be sold in one tank car?
- A. I would say it would be better to have it all in one, but when you examine the advantages of the Core-Min-Oil I think it will more than offset the disadvantage of sending it in two cars.
- Q. Let's assume a fairly large foundry which has a storage tank for its core oils, and that it buys its core oils in tank cars, and it has a system of lines and pumps by which it takes the oil from the tank car to its place of storage, which we might call the storage tank, through these series of lines and pumps; do you think that your Core-Min-Oil had sufficient advantages over the core oils then on the market that it would justify the foundry in installing an additional set of lines and pumps, if such became necessary?

 A. I certainly do.
- Q. You have no idea of the amount of time, and labor, and money that would be expended in the installation of such a system?

- A. No, I haven't.
- Q. Will you now enumerate for me all the advantages of your Core-Min-Oil which you claim for it, over and above core oils which were on the market at the time you entered the field?
- A. First, it had a drying time that saved two-thirds of the time in drying. [978]
- Q. I don't mean to interrupt you, but we use the word "drying," for example, as meaning drying of the sand on the benches, and when you use it there you mean the cooking or baking time?
 - A. That's right.
 - Q. Proceed.
- A. And it requires a great deal less, fewer ingredients than are required by the others, so it will stand the weight of the metal when it is poured. It has less gases that come off of it to cause bubbles in pouring the casting. It has more resistance to heat than the other core oils that are on the market.
- Q. What do you mean by "more resistance to heat", Mr. Ruddle?
- A. Well, it makes a smoother core; the metal doesn't burn into it. I think those are the principal things that we claim for it.
- Q. Can you think of any other advantages, principal or otherwise, that in your opinion, are found in your Core-Min-Oil and that are not present in the core oils which are on the market?
- A. Well, no; I think that is—I think those are the advantages that I can think of right now.

- Q. And there may be others, but you can't recall them at the present time?
 - A. Yes, that's right.
- Q. If I understand your testimony correctly, immediately prior to your going to Shell in December, 1937, or January, 1938, you had been using a Union Oil asphalt emulsion in the making of your Core-Min-Oil?
 - A. American Bitumuls Co.
- Q. And I believe you testified that, generally speaking, there was very little difference between the Union Oil emulsion and the Standard Oil emulsion, or American Bitumuls, whichever is proper.
- A. As I recall, the Standard Oil Company brought over some five or six different emulsions, and there was a difference in some of those emulsions. [979]
- Q. Did they all make satisfactory cores, or were some of them not good?
- A. No; some of them had a gas that came off when we poured the casting, as I remember it.
- Q. Of that group of asphalt emulsions that you worked with, namely the Union Oil emulsion and the American Bitumuls emulsions, which one would you say was the best suited for your purpose in making your Core-Min-Oil?
- A. Well, that would be hard to tell, but I thought at the time the Union Oil Company emulsion was the better one.
 - Q. After you took your Core-Min-Oil to Shell

in December, 1937, or January, 1938, Shell used an asphalt emulsion prepared by them, which was called Y-104, is that right?

- A. That's right.
- Q. Did you personally make any cores with your Core-Min-Oil using Y-104? A. Yes, I did.
- Q. Did you observe any difference in the result of the cores when you used the Y-104 as compared with the Union Oil asphalt emulsion?
 - A. No, I couldn't tell the difference.
- Q. As far as you were concerned, Shell's Y-104 and Union Oil asphalt emulsion were equally satisfactory for the purpose of making a core oil?
 - A. Yes, as far as I could tell.
- Q. Did you ever make any complaint to the Shell Company over the fact that they were using Y-104 and not Union Oil emulsion? A. No.
- Q. Did either you or Mr. Peck have any part in fixing the market price at which your Core-Min-Oil was to be sold by Shell, or was that a matter that was left to Shell's discretion?
- A. That was left to the Shell Oil Company's discretion.
- Q. Did you ever have any discussion with anyone connected with Shell concerning the price at which Shell might be able to market your product?
 - A. Yes, we did. [980]
- Q. Did you arrive at a price at which your Core-Min-Oil might be marketed?
 - A. Well, that was left entirely with the Shell

Company; they explained that, Mr. McSwain and Mr. Gratama explained that our positions were parallel and that they would get the best price obtainable, and that we should leave it entirely with them.

- Q. Since the contract that you had with Shell provided that you get certain royalties based on the scale set forth in the contract, as long as you got the royalties as provided by your contract you weren't much concerned with the profits Shell made; is that a fair statement?

 A. Yes, that's right.
 - Q. That is just about the way the situation was?
 - A. Yes, that's right.
- Q. If Shell had discovered that it could not sell your Core-Min-Oil at a price that would justify their paying you the royalties as set forth in the contract, that would have been just too bad for Shell?

Mr. Hursh: I object to that as purely hypothetical. He doesn't know what is in Shell's mind.

Mr. Aurich: Q. So far as your mind is concerned?

A. There was no minimum set in the contract. Shell was not required to sell a minimum, but they contracted to sell the maximum amount that could be sold by them.

Mr. Aurich: Q. Well, that doesn't quite answer my question. Without asking you to interpret the contract, and I am not being specific about the amounts now, the contract provided that on a [981]

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
certain graduated scale you were to get a certain
amount as royalties; is that your understanding
of it?

A. Yes.

Q. Now, if Shell had discovered that it could not sell Core-Min-Oil at a price sufficient to justify paying you the royalties set forth in that contract, nevertheless you would have required Shell to continue to market the product?

Mr. Hursh: I object to the question on the same ground; it is a hypothetical question. No showing on the record that Shell could not have sold Core-Min-Oil at a price that would give them a fair profit, and the determination of that particular question as to whether or not Shell would make a fair profit would determine the answer Mr. Ruddle would give to your question.

Mr. Aurich: Will you read the question, please? (Question read by the reporter.)

Mr. Aurich: Let me put it another way, Mr. Ruddle:

- Q. Your only interest in this matter was to see that Core-Min-Oil was sold and that you received the royalties provided for by the contract?
 - A. That's right.
- Q. Whether Shell made a more substantial profit than you were realizing on the transaction, or whether it made no profit at all, was a matter that gave you no concern; is that a fair statement?

Mr. Hursh: I object to the question on the same ground.

A. That's right.

Mr. Aurich: Q. Did either you or Mr. Peck have any part in determining to whom your Core-Min-Oil was to be sold by Shell, or was that likewise a matter that was left to Shell's discretion?

A. No, that was left entirely to Shell Oil Company.

Q. Did either you or Mr. Peck have any part in determining how your Core-Min-Oil was to be sold by Shell, or was that likewise a matter that was left to Shell's discretion?

A. That was left entirely [982] to Shell Oil Company.

Q. I assume that if Shell had engaged in the manufacture and sale of your Core-Min-Oil and as a result thereof had lost a considerable amount of money, you were not to share in those losses, is that right?

A. I don't know that there was any mention made of that.

Q. Well, it was your understanding of it—it is your understanding of that transaction, that you were to share in the losses, if any, incurred by Shell, or that you were not to share in any losses; which is it?

A. My understanding was that we were not to share in any losses. I don't think the word "losses" was ever brought up during these conversations.

Mr. Aurich: Q. I don't believe I asked you before, but if not I would like to ask you now: What

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
is the ratio of sand to oil used by you in your core oil?

- A. As I remember it, it was 1-to-17½, up to 1-to-20 or 1-to-21, something like that.
- Q. That is, you would use one part of your Core-Min-Oil to, roughly, twenty parts of sand; is that about right?
 - A. As I recall it, that's right.
- Q. I want to call your attention again to a letter which we have referred to before. The letter is Exhibit G attached to the complaint, and which you wrote to the Shell Company under date of September 6, 1939, in response to a letter from them of August 18, 1939. Can you tell me who wrote that letter?

 A. I don't know who wrote it.
 - Q. Did you dictate it?
 - A. No, sir, I did not.
 - Q. Did Mr. Peck dictate it? A. Possibly.
- Q. Did Mr. Hackley know anything about the framing of that letter?
 - A. That is possible; I don't know.
 - Q. You signed it, however? A. Yes. [983]
- Q. I want to call your attention to the second paragraph on page 3 wherein you state as follows:

"This was particularly distressing and impossible of understanding in the light of the fact that we have known for some time prior to the date of your attempted move toward cancellation, that in the course of working with and developing our product, as provided by the con-

tract, you had made contemporary discoveries which enable you to propose what your employees and representatives described as a product which incorporates all of the advantages of our original disclosure and possesses additional commercial properties of a nature which we had all been seeking."

My question is for you to tell me how long prior to the date of that letter, September 6, 1939, you had been aware of the facts recited in the portion that I quoted to you, and I am now showing you the letter for your inspection, and you are to feel at liberty to read the entire letter if you so care to.

A. Well, those facts were gathered from conversations with Mr. McSwain and a letter we received from Mr. McLaren; I think that was the basis of those statements.

Q. That was the letter of July 26, 1939, from Mr. McLaren to you, which is Exhibit D attached to the complaint?

A. Yes, that's right.

Mr. Hursh: You better read that, Mr. Ruddle; read the whole content of it so you will know exactly what the question refers to.

Mr. Aurich: Q. If that should not be the letter to which you referred in your answer to my main question I wish you would go through the copies of the letters attached to the complaint and see if you can find the letter to which you do refer. [984]

A. No, that doesn't seem to be the letter. I think it is the letter of August 18th.

Mr. Aurich: Q. You now believe it is the letter of August 18, 1939, Exhibit F to the complaint?

A. Yes.

Q. Is that the only basis for the statement appearing in the paragraph of the letter, Exhibit G, to which I directed your attention; that is, the letter of August 18, 1939, Exhibit F to the complaint, and a conversation with Mr. McSwain?

A. That's right.

Q. When was the first conversation with Mr. McSwain that gave you the information set forth in the paragraph of the letter, Exhibit G, to which I have directed your attention?

A. Well, there were continuous conversations with Mr. McSwain. I was at his office two or three times a week. He was telling me the different things they were doing, the work the Shell Development was doing on the different products that they were making. Then he divulged to me that they had developed something that was perfect for a core oil.

Q. This disclosure by Mr. McSwain to you was at the time that the two of you had a conversation during which Mr. McSwain said that Shell was no longer going to carry out the provisions of the contract?

A. Well, yes; I think it was just prior to that he told me they had been able to develop core oil that met all the requirements of linseed oil and had

the same drying time that the Core-Min-Oil has.

- Q. That would be sometime probably in the month of July, 1939?
- A. Well, I wouldn't want to say what time it was; it was just prior to this letter from Mr. Mc-Laren.
- Q. Not very long prior to the letter of cancellation of the contract; is that the one you refer to now, Exhibit D, attached to the complaint, a letter dated July 26, 1939?
- A. Yes, I would [985] say not very long before that.
- Q. What did you mean by "contemporary discoveries," which was referred to in the portion of the letter I have quoted to you?
- A. Well, as I recall, that discovery was made while they were working with us on Core-Min-Oil.
- Q. That is what you meant by the use of the term "contemporary discoveries"?

 A. Yes.
- Q. What were the additional properties of a nature which you had all been seeking, which you refer to in the portion of the letter that I quoted to you?
- A. Well, the CO₂ gas was the principal objective that Shell was trying to get.
 - Q. You mean by "get," overcome?
 - A. Yes.
- Q. Is that the only additional commercial property that you refer to in the portion of the letter to which I have called your attention?

- A. Yes, I think so.
- Q. Did you consider because of the fact you had the CO₂ difficulty with your Core-Min-Oil, that your Core-Min-Oil lacked commercial properties?
- A. Well, it was limited to ovens that were free of CO₂ gas.
- Q. That is one commercial property, at least, that was lacking in your Core-Min-Oil?
 - A. That's right.
- Q. In that portion of the letter, Exhibit G, that I quoted to you, you referred to "advantages of our original disclosure." What advantage of your original disclosure were you there referring to, in that portion of the letter, Exhibit G?
- A. Well, the drying time, and the fact that in all of our tests we hadn't lost any castings.
- Q. That is all you refer to by the use of the expression "advantages of our original disclosure"?
 - A. Yes, that's right.
 - Q. Fast baking time?
 - A. Yes, that's right. [986]
- Q. I notice that under the terms and provisions of your contract with Shell which is in controversy here, and in paragraph 7 it states that Shell "will pay as royalty to Peck and Ruddle on all their sales of Core-Min-Oil and other compositions for factory use sold in the United States." According to the sliding scale set forth in that paragraph of that contract.

At the time of the entering into of that contract,

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
what compositions for foundry use did you and Mr.
Peck have in mind?

Mr. Hursh: Just a moment. I will object to that question. I think the contract speaks for itself and is the result of the negotiations between the parties, and was written down by the parties as to what understanding had been reached. The understanding had been reached between these parties, and his interpretation of the contract at the present time is not proper examination of this witness. It is a question for the Court to determine what interpretation is to be given to the language recited in the contract.

Mr. Aurich: Will you read the question, please? (Question read by the reporter.)

- A. All of the compositions for foundry use.
- Mr. Aurich: Q. Would that include linseed oil?
- A. If the Shell sold it, yes.
- Q. Would it include Houghton Oil?
- A. Anything that was sold for foundry use.
- Q. Well, would it include your oil?
- A. Yes.
- Q. Would it include Quandt Oil?
- A. Yes.
- Q. Linoil? A. Yes.
- Q. Would it include Houghton Oil?
- A. Yes.
- Q. Would it include a core oil made of sodium silicate and asphalt emulsion? A. Yes. [987]

- Q. Would it include linseed oil cut down with petroleum oil? A. It would.
- Q. Would it include lubricants such as grease?
 Mr. Hursh: Well, I will object to that question as indefinite. Lubricants for what purpose?

Mr. Aurich: For foundry use.

A. I would say I wouldn't.

Mr. Aurich: Q. Would it include kerosene sold to foundries?

- A. If it was used in the art of core making I would say it would.
- Q. Did you ever know of the use of kerosene in the art of core making?
 - A. Yes, it is used.
 - Q. For what purpose?
- A. It keeps the core from sticking to the box, and they use quite a bit of it.
- Q. And it was your understanding at the time you entered into the contract with Shell, which is here in evidence, that you were to receive a royalty on all kerosene sold by the Shell Company for that use?
 - A. If it was used in the art of core making.
- Q. Well, it is used in the art of core making, isn't it?
 - A. Yes; I would say we would be entitled to that.
- Q. You think if Shell should sell the Vulcan Foundry a drum of kerosene to be used by the Vulcan Foundry for cleaning out their core boxes, that you would be entitled to a royalty for that purpose?

- A. No, I wouldn't say so; no.
- Q. Well, then, what did you mean by your previous testimony, when you stated that if the Shell Company sells kerosene to the foundry, and it was used for foundry uses, you were entitled to a royalty? [988]
- A. I meant if it was used in a core making operation.
- Q. In other words, your intention by the inclusion of that language that I have referred to, was that you would receive a royalty from Shell on anything they would sell that was used for making a core oil?

 A. That's right.
- Q. And not such as oils for the various machines they use in the foundries?

 A. Certainly not.
- Q. Nor would that include the cost of oil that might be used in oil burning ovens?

 A. No.
 - Q. It would not include that? A. No.
 - Q. Would it include core covering, or core wash?
 - A. The contract calls for that.
- Q. It was your understanding that the language that I have referred to was to include core wash?
 - A. Certainly.
- Q. Now, you notice that the sliding scale of royalties is set forth on the top of page 3, and the first line reads:

"On the first million gallons sold per year, 15 percent."

I take it that means you were to receive 15 percent on the first million gallons sold during a year?

Mr. Hursh: I object to that question as calling for an interpretation of the contract, which speaks for itself.

A. We were to get 15 percent of the gross sale price.

Mr. Aurich: Q. Yes. What I am trying to find out, Mr. Ruddle, is what was that 15 percent to be computed on? Was that 15 percent of the gross selling price of Ruddle Solution alone, that was sold by the Shell Company; was it to be computed on gallons of asphalt sold, alone, by the Shell Company; or was it to [989] be computed on the number of gallons of Ruddle Solution and asphalt emulsion computed together?

Mr. Hursh: I object to the question on the ground the contract speaks for itself, and any interpretation of the contract by the witness has no bearing on the case.

A. Well, I will have to read it.

Mr. Aurich: Q. Well, if you can find it, go ahead and read it.

- A. (After reading document) It was for both.
- Q. That was to cover the total gallonage of asphalt emulsion and Ruddle Solution computed together?

 A. That's right.
- Q. In other words, if Shell sold one gallon of asphalt emulsion and one gallon of Ruddle Solution, for the purpose of computation under para-

graph 7 of the contract, that would be considered to be one gallon?

A. That's right.

· The Witness: That would be two gallons, rather.

Mr. Aurich: Q. Well, I am merely trying to find out your answer and your understanding of the contract, Mr. Ruddle. I thought I had it. I understood you to say a moment ago that the royalties as set forth in paragraph 7 of your contract were to be computed on the number of gallons of asphalt emulsion and Ruddle Solution together.

A. That's right.

Mr. Hursh: Q. Will you read the contract, Mr. Ruddle, and take your time, and see just what your answer would be?

I will object to the question, because it again calls for an interpretation of the contract, and it speaks for itself.

A. It was to be sold together. If you sold a gallon of each, that would be a sale of two gallons; that is my interpretation.

Mr. Aurich: Q. That was your understanding of it? [990] A. Yes.

Q. In other words, if Shell sold one million gallons of asphalt emulsion and one million gallons of Ruddle Solution, you would be entitled to royalties on two million gallons?

A. That's right.

Q. If it sold one million gallons of asphalt emulsion, for core oil purposes, now, I am speaking of, and no gallons of Ruddle Solution, you would be

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
entitled to a royalty of 15 percent on the million

entitled to a royalty of 15 percent on the million gallons of asphalt emulsion, according to your understanding?

A. Yes.

The Witness: That contract goes on to say there what was not sold for core wash was not to be computed in that.

Mr. Aurich: No; I was just speaking of core oil.

Mr. Aurich: Q. Do you know how much money the Shell Company spent in its attempt to develop your Core-Min-Oil up to the time that they turned your Core-Min-Oil back to you?

- A. No, I do not know.
- Q. You knew, of course, that the Shell Company bought the Thomas patent for \$1,000, as is provided in the contract?
 - A. Yes, I knew they told us that.
- Q. Have you ever been told by anyone of Shell's expenditures in its attempt to develop your Core-Min-Oil, either prior to or after the contract was entered into?

 A. No.
- Q. Has Shell ever made any demand on you for payment of any part of its expenditures in that connection?

 A. No. [991]
- Q. Did you at any time ever complain to Shell because of the type of asphalt emulsion they were using? Λ . No.
- Q. Did you at any time ever complain to Shell because of the type of sodium silicate they were using?

 A. No.

- Q. Do you know what degree Baume sodium silicate they were using?

 A. No, I don't.
 - Q. Did you ever know? A. No.
- Q. Following the signing of the contract with Shell on April 8, 1938, did you do any further development work of an experimental nature in connection with your Core-Min-Oil?
- A. No; only with the Shell Company. I went along with their tests.
- Q. Did you ever do any experimental work in connection with your Core-Min-Oil at any place other than the Vulcan Foundry or the Shell laboratory after the signing of the contract?
 - A. No, I didn't.
- Q. You didn't do some experiments at some time in connection with some powdered sodium silicate?
- A. Well, I didn't do any experimental work other than just mix it in some of the Ruddle Solution and—I mean the sodium silicate with asphalt emulsion, and tried to make a dry paste. That was when we were after an asphalt emulsifying for them to try. I didn't try it.
 - Q. Didn't you try it personally?
 - A. I don't believe that I did.
 - Q. Who did try it?
- A. I took it over to Shell Company. I think probably Spotswood tried it; I am not sure.
- Q. You say you took it over to Shell Company. What is that?
 - A. This mixture of dry silicon and asphalt emul-

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) sion in a jar, over to McSwain at the Shell Company.

- Q. In other words, you, at some place, mixed up a solution of powdered sodium silicate and asphalt to see if you could get a [992] stable solution between the two?
- A. It just occurred to me we might make a paste so we could put the water in it at the foundry and possibly we could keep it from separating.
- Q. Is that what you did, made up this solution and put it in a jar and delivered it to Mr. Mc-Swain?

 A. Yes.
 - Q. Where did you do that work?
- A. I am not sure, but I think I mixed those together over at Mr. Peck's garage, over in Oakland.
- Q. Did you make any cores with this solution of powdered sodium silicate and asphalt emulsion?
- A. It might be that I did over there at Mr. Peck's garage.
- Q. Do you recall anything concerning that at this time?
 - A. No, I don't know whether I did or not.
- Q. I may be in error, Mr. Ruddle, but I thought you testified yesterday that you had never experimented with a core oil consisting of sodium silicate and asphalt emulsion alone; is my understanding correct?
- A. Well, I made cores out of it, but I don't think I ran any tests to amount to anything.

- Q. Your only purpose in mixing the powdered sodium silicate and asphalt emulsion was to make a paste, so that after it was shipped to the factory they could add water to it and thus make it a suitable core oil?
 - A. Yes, that is what I had in mind.
- Q. Did you ever make, or did you not make any cores with this core oil, consisting of powdered sodium silicate and asphalt emulsion?
- A. I can't recall whether I did or not. I might have made some, just small cores, over at Mr. Peck's garage, but I can't recall now whether I did or not.
- Q. Why were you experimenting on just the sodium sillcate and asphalt emulsion?
- A. Because the Shell Company were trying asphalt emulsion in some cores and they were having trouble trying [993] to put it in one package, and the thought then occurred to me it may be if we could use dry sodium silicate we might be able to get it in one package to use.
- Q. In either words, you knew prior to the time of your experiment with this powdered sodium silicate that Shell had theretofore been experimenting with a core oil consisting of sodium silicate and asphalt emulsion alone?
 - A. Yes, I knew that.
- Q. You had known that for quite some time prior to your experiments?
 - A. Yes, that was prior to that.
 - Q. How long prior to that experiment, if you

know, was it that you first obtained knowledge that Shell was experimenting with sodium silicate and asphalt emulsion?

- A. It was when Mr. Waller was here, because he is the one who showed me the sample made out of sodium silicate.
- Q. Then this was before Mr. Waller left for Seattle? A. Yes.
- Q. That you first knew that Shell Company was experimenting with a core oil consisting of sodium silicate and asphalt emulsion? A. Yes.
- Q. That was before the option period, as it had been extended by you and Mr. Peck, expired?
 - A. I couldn't fix the date.
- Q. Don't you recall some discussions that were had between you and Shell relative to revising the contract that then existed, or entering into another contract instead?

 A. Yes, that's right.
 - Q. That was prior—
- A. That was prior to having them exercise the option.
- Q. So that if Shell exercised the option in November, 1938, it was prior to that that you knew that Shell had been working with sodium silicate and asphalt emulsion for core oil purposes?
 - A. Yes, that's right.
- Q. I show you a document—after your counsel has looked at it— [994] and I will ask you if you can tell us something about it?
 - A. Yes; that is when I put the powdered silica

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) in asphalt emulsion at Mr. Peck's garage in Oakland, that I referred to awhile ago.

- Q. The document that I showed you is a copy of an affidavit executed by you, isn't it?
 - A. Yes.
- Q. That is your signature appearing on the document, "A. B. Ruddle"? A. That's right.
- Q. That is Mr. Lydell Peck's signature appearing underneath it? A. That's right.
- Q. Are the statements contained in this document true and correct to the best of your knowledge?

 A. That's right.

Mr. Aurich: I now offer in evidence the affidavit of A. B. Ruddle which is identified by the witness, and ask that it be marked Defendants' Exhibit U.

(The affidavit referred to was marked Defendants' Exhibit U.)

Mr. Aurich: Q. I call your attention to the statement appearing in this affidavit which states, in effect, that you made a good core in a certain percentage of asphalt emulsion and sodium silicate. Where was that core made?

- A. At 652 Spruce Street.
- Q. That is Mr. Peck's garage?
- A. That is Mr. Peck's garage.
- Q. Was the core baked after you made it?
- A. Yes, we baked it in his stove in his home.
- Q. What kind of a stove is that, an electrical stove?

- A. No; it is a gas stove, but it is not exposed to the flames. It is one of those where the gas can't get to it.
- Q. In other words, somewhat the equivalent of an indirect fired oven? A. Yes.
- Q. Did you have any laboratory apparatus at Mr. Peck's garage?
- A. No. We had scales and measuring tubes, things of that character. [995]
 - Q. Do you know whether Mr. Peck is a chemist?
 - A. No, he isn't.
- Q. Following the experimental work which you did at Mr. Peck's garage in May, 1939, what other experimental work have you done toward the development of your Core-Min-Oil, if any?
 - A. That is all I can recall.
- Q. Have you done any experimental work on Core-Min-Oil following the cancellation of the contract with Shell? A. I have not.
- Q. Have you attempted to place your Core-Min-Oil into a single package, or to make what is termed a ready-to-use core oil out of it?
 - A. No, we haven't done anything with it since.
- Q. So that so far as you are concerned the status of your core oil is the same now as it was when Shell cancelled the contract?

 A That's right.
- Q. Have you made any endeavor to have your Core-Min-Oil manufactured and sold by anyone since the termination of the contract with Shell?
 - A. We have not.

- Q. Do you know that Shell has expressed its intention of never entering into the core oil business, that is, of never entering into a core oil business, in the manufacture and sale of that type of a core oil?

 A. No, I don't know that.
 - Q. You didn't know that? A. No.
- Q. Has anyone advised you that the Shell Company has no intention of entering into, marketing and selling of a core oil? A. No.
- Q. Just in your own language, Mr. Ruddle, state what relief you want from the Shell Company.

Mr. Hursh: I object to the question. The complaint sets forth the relief that Mr. Ruddle and his associates are asking. It will speak for itself.

A. We want the Shell Oil Company to perform its contract with us. [996]

Mr. Aurich: Q. Well, that is very general. I am speaking specifically, now. Do you want them to market and sell your Core-Min-Oil?

- A. Yes, that's what we want.
- Q. Even though it can't be sold in foundries where they use a direct fired oven?
- A. Yes. We want them to sell it in every foundry that it can be sold in.
- Q. And that is true even though the percentage of foundries having indirect fired ovens may be so small as to preclude the possibility of any sales in any quantities of your Core-Min-Oil?
 - A. Well, we aren't trying to limit the foundries

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
that have direct fired ovens from changing to indirect fired ovens.

- Q. Well, before Shell would undertake the sale of your Core-Min-Oil is it your desire that the Shell Company enter into a program of education, a promotional sales work, let us say, to induce the foundries having direct fired ovens to change from that to indirect fired ovens?
 - A. Well, that is what we expected them to do.
- Q. I supose you also want the Shell Company to compensate you in some manner? A. Yes.
- Q. In Paragraph 24 of your complaint, verified by you, page 11, lines 24 to 26, you allege that you "have been damaged and injured in an amount in excess of \$100,000." Will you tell me how you arrived at the amount of said alleged damage as is therein set forth?

Mr. Hursh: I object to that question as incompetent, irrelevant and immaterial.

A. That was an arbitrary figure that we placed in there.

Mr. Aurich: Q. Who is "we"?

- A. Mr. Peck and myself. Mr. Hackley, who we discussed that with, he told us that that figure didn't mean anything, that if the [997] amount that we could show we were damaged was a million dollars, that figure wouldn't be limited to \$100,000.
- Q. Let me put it this way: Do you figure you have been damaged at least in the amount of \$100,000?

- A. Yes; I think many times that much.
- Q. How did you arrive at that figure?
- A. Well, we, with the Shell Oil Company, and even prior to the Shell Oil Company entering into it, we determined the size of the linseed oil market.
 - Q. What was that size?
 - A. It was 23,000,000 gallons a year.
- Q. That is 23,000,000 gallons per year of linseed oil was sold for foundry use? A. Yes.
 - Q. How did you get that information?
- A. We have that in a letter from the magazine called "Foundry."
- Q. I show you what purports to be a copy of a letter from the "Foundry," dated November 26, 1937, addressed to Mr. Peck, which your counsel, Mr. Hackley, offered in evidence as Plaintiffs' Exhibit 2 on the taking of the deposition of Mr. McSwain, and will ask you to state if that is the letter to which you have reference?
 - A. Yes, this is the letter I referred to.
 - Q. That letter is dated November 26, 1937?
 - A. That's right.
- Q. That is before your first conversation with Shell relative to your core oil?
 - A. That's right.
- Q. Now, assuming that the information stated in that letter is correct, in that there are 23,000,000 gallons of linseed oil sold to foundries for core oils, how did you arrive at the figure you were damaged in the extent of at least \$100,000?

- A. Well, we would do approximately three times as much.
 - Q. That would be 69,000,000 gallons each year?
 - A. Yes, that would be.
- Q. How did you arrive at the figure that that would be 69,000,000 [998] gallons a year of your Core-Min-Oil, and by 69,000,000 gallons you mean 69,000,000 gallons of Core-Min-Oil and not of Ruddle Solution alone?
 - A. No, that would be together.
- Q. The combined Ruddle Solution and asphalt emulsion together?

 A. Yes, I think so.
- Q. How did you arrive at the figure, then, of 69,000,000 gallons per year that you would sell?
- A. Well, in our talks with the Shell Oil Company we talked figures of 10,000,000 gallons a year and 20,000,000 gallons a year, and they estimated, when they talked to us about it, they could sell at least 50 percent of the foundries, 50 percent of that amount. We talked those figures; it is an estimate.
- Q. Irrespective of what Shell may or may not have done, or what Shell may or may not have told you, how did you arrive at the figure of 69,000,000 gallons per year as representing the amount of Core-Min-Oil that could be sold?
 - A. Other than this letter?
- Q. No. I am trying to figure out how you figured you could sell three times the amount of the total gallonage of linseed oil that was sold.
 - A. I said if we supplanted the linseed oil market

it would require 69,000,000 gallons of Core-Min-Oil.

- Q. What was there in the course of events that led you to believe you would supplant the entire linseed oil market in the core oil field?
- A. Well, we never figured that we could supplant it, but we figured about 50 percent of the market.
- Q. In other words, you merely hoped that you would be able to supply at least 50 percent of the market with core oil that was then using linseed oil?
 - A. That's right.
- Q. It was your hopes and expectations, rather than anything else?

 A. That's right.
- Q. You had no factors upon which that was predicated? [999]
- A. No; only just our opinion, our judgment in the matter.
- Q. By "our judgment," whose judgment do you mean?
- A. I mean Mr. Lydell Peck, myself, Mr. James F. Peck, who was alive at that time.
- Q. It was very possible that your hopes and expectations might not be realized and that you might sell a great deal less than half the linseed oil market with your core oil?
- A. We think that if it was diligently put on the market at that time they could have reached, within a reasonable time, could have reached that much of the market.
 - Q. Oh, that was the hope and expectation of you

and Mr. Lydell Peck and Mr. James F. Peck at the time he was alive? A. That's right.

- Q. You made no independent investigation to determine what market, if any, there was, for a sodium silicate base core oil such as your Core-Min-Oil? A. No.
- Q. In arriving at the conclusion, or hopes and expectations that Core-Min-Oil could displace about 50 percent of the linseed oil on the market then being sold for use as a core oil was the fact that your Core-Min-Oil was not a ready-to-use core oil, or was not capable of being sold in a single package, if you prefer, given any consideration?
 - A. No, it was not.
- Q. You didn't take that factor into consideration at all in arriving at your hopes or expectations?
 - A. No.
- Q. In your opinion, all other things being equal, is a core oil that is ready to use one that can be successfully marketed among other ready-to-use core oils?
- A. Yes, if it has the advantage of drying time, it could be.
- Q. How much of the linseed oil market for use in core oils do you think you could take with your Core-Min-Oil with the foundries as [1000] they are constructed today?

 A. I haven't any idea.
- Q. Do you think it would be a large percentage, or a small percentage?
 - A. I think it would be a small percentage.

- Q. It would be an exceedingly small percentage, as a matter of fact, wouldn't it?
- A. I don't know to what extent. I understand there are quite a few of them that are indirect.
- Q. In Paragraph 21 of your complaint, page 10, lines 29 and 30, and on page 11, line 1, you allege that Shell "has refused to account to plaintiffs in any manner whatsoever for royalties accruing under the contract." Will you enumerate the royalties which accrued under the contract in controversy and which Shell has refused to pay to you?

Mr. Hursh: I object to the question on the ground the contract speaks for itself and is the best evidence as to whether any royalties are due and payable, and also the complaint speaks for itself.

A. The Shell Oil Company didn't render any statements to us.

Mr. Aurich: Q. Well, what I want to know is what you meant by that language; will you enumerate the royalties which accrued under the contract and which Shell refused to pay you?

- A. No, I don't know of any royalties.
- Q. Do you know from whom Shell received any royalties which you say accrued under the contract?
 - A. No, I don't.
- Q. Well, can you name the amount of royalties that accrued under the contract between you and Shell which Shell has refused to account to you?
 - A. No, I can't.
 - Q. Can you name one instance of the Shell Com-

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) pany receiving any royalties under the contract for which they have not accounted to you?

- A. No, I cannot.
- Q. Do you know, as a matter of fact, that Shell has never received [1001] one cent from the sale of Core-Min-Oil?

 A. No, I don't know.
- Q. You did not know that Shell has never sold Core-Min-Oil?
 - A. No, I don't know what they have done.
- Q. Did Shell ever advise you that they had ever sold your Core-Min-Oil?
 - A. No, they have not.

Mr. Aurich: For your information, I will advise you that at least up until the present time Shell has not sold one gallon of a core oil.

Mr. Hursh: That is not stating they could do it if they wanted to.

Mr. Aurich: Q. Now, let's look at Paragraph 5 of this complaint, which is on page 3. In that paragraph you allege "that commencing on or about February 1, 1938, and after a confidential disclosure of said product and demonstration thereof to members of the executive personnel of Shell Oil Company"—the Shell Oil Company did certain things. What confidential disclosure did you refer to at that place in your complaint?

A. Well, that date is wrong.

Mr. Hursh: I object to the question on the ground all of the allegations of the complaint will be proven at the time of trial, and it is merely a fish-

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Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
ing expedition on behalf of counsel for defendants,
and they are not at this time entitled to such information.

Mr. Aurich: Q. What was your answer, Mr. Ruddle?

- A. I would say the date is wrong.
- Q. The date, February 1, 1938?
- A. Yes. In January, 1938——
- Q. In other words, prior to February 1, 1938, you had never made——

Mr. Hursh: Q. Mr. Ruddle, are you looking at

the right page?

A. It was after the contract was signed. [1002] Mr. Aurich: Did you ever make a confidential disclosure of your Core-Min-Oil to Shell Oil Company about February 1, 1938? A. No.

Q. The first alleged confidential disclosure of your product was made to the Shell Company after the signing of the contract here in suit on April 8, 1938, is that right? A. That's right.

Q. The date of February 1, 1938, appearing on line 19, page 3, Paragraph 5; is that correct?

A. Well, I don't know what that refers to; it might refer to the information that I gave them regarding making cores and things of that nature. We treated that as confidential.

Q. And you appreciate, Mr. Ruddle, that this is your complaint, that you read it over very carefully, presumably, and at least subscribed to it before a Notary Public, and if you don't know what

you meant by your language somebody else is going to have a rather difficult time in arriving at that knowledge. What I want to find out is what is the confidential disclosure that you made to Shell commencing about February 1, 1938?

Mr. Hursh: I might say my objection runs to this whole line of questioning.

Mr. Aurich: It may be so understood.

The Witness: I might read all of this and tell you.

Mr. Aurich: Q. You are at liberty to read the entire complaint.

- A. I will say that date was in error.
- Q. That is the date at the place I have referred to on line 19, page 3?

 A. Yes.
- Q. That should be "commencing about April 8, 1938"?

 A. Yes, that's right.
- Q. And that confidential disclosure, as we have been over it many times, is a disclosure you made to Mr. McSwain and Mr. Gratama in [1003] Mr. Peck's office, after the signing of the contract?
- A. Well, I think it was in the Shell Company's office, but it was right after.
- Q. That was the occasion, no matter at whose office it was?

 A. That's right.
- Q. I want to call your attention to a paragraph in this complaint, that is, a portion of paragraph 14, commencing, or appearing at page 8, line 3, which reads:
 - " . . . In addition, and prior to the execu-

iton of the contract Exhibit B hereto annexed, and likewise upon a requirement that the same be maintained in strict secrecy and confidence, and upon a promise by said Shell Oil Company to maintain all disclosures in strict secrecy and confidence, and to utilize the same only under and subject to license of plaintiffs, plaintiffs disclosed to Shell Oil Company and to defendant Shell Development Company all the developments theretofore made in the art of core oils and related products by plaintiffs."

Again I will say that you are at liberty to read the entire paragraph or the entire complaint, if you like. My question is: Is it your testimony now that that is a true and correct statement of the fact?

Mr. Hursh: Same objection.

A. Yes, I think those are the facts.

Mr. Aurich: Q. Is it your testimony, Mr. Ruddle, that prior to the execution of the contract in question you disclosed to Shell all developments theretofore made by you in the art of core oils?

A. No. That is subsequent to signing the contract.

Q. You notice the language of the portion of the complaint that I referred to says "prior."

A. Well, it should be "subsequent." [1004]

Q. Then the statement as I have read it to you and as appears in your complaint is not quite accurate, is it?

A. No; that's right.

Mr. Hursh: I want to base my objection to the entire line of questioning.

Mr. Aurich: I so understood it carries right through.

Q. Your last answer, you meant that the statement appearing in the complaint is true?

A. Is wrong; that your question is right, your interpretation is right.

Q. In other words, prior to the execution of the contract involved in this suit you did not disclose to Shell all developments theretofore made in the are of core oils by you?

A. That's right.

Q. Now, I have one or two more places. I call your attention to Paragraph 17 of your complaint which appears on page 9, in which you allege, under oath:

"...; that defendants, acting jointly and severally, threatened to disclose, and upon information and belief are alleged to have disclosed, to the public in general, portions or all of said confidential disclosures of plaintiffs to said Shell Oil Company and to defendants."

I show you the portion of the complaint which I read, with the same instruction to read all or any part thereof that you desire, and I want to ask you to give me the names of any person or persons to whom either of the defendants herein disclosed your alleged confidential disclosure to Shell.

A. I know of none.

- Q. Do you know of any disclosure by either of the defendants herein to anyone of the formula of your Core-Min-Oil which you disclosed to Shell after the signing of the contract? A. No.
- Q. So far as you know, Shell has never disclosed to the public in [1005] general, or to anyone, portions or all of your alleged confidential disclosure, have they?

 A. Not to my knowledge.
- Q. Do you know of any instance in which the defendants herein threatened to disclose to anyone the alleged confidential disclosure made by you to Shell?

 A. No, I don't.
- Q. Have you filed any application for letters patent on any work you may have done in connection with core oils since the receipt of the letter of cancellation of the contract from Shell?

Mr. Hursh: I object to the question as calling for confidential information, and to which the defendant has no right.

A. I have not.

Mr. Aurich: Q. I neglected to ask you in connection with the portion of the complaint appearing in Paragraph 17, where you say the defendants threatened to disclose to the public generally, and did disclose to the public generally, your alleged confidential disclosure to Shell. That portion of that paragraph is in error, isn't it?

- A. It is; that is, so far as I know.
- Q. Of course, I am only speaking of your own

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
knowledge When did the fact that that was

knowledge. When did the fact that that was an error first come to your attention?

- A. Just now.
- Q. You didn't notice it at the time you read the complaint and swore to it?

 A. I did not.
- Q. You did read the complaint before you signed it?
 - A. I think I did. I am not so sure that I did.
- Q. I believe you have testified that since the receipt of the letter from Shell in which they advised you they were going to cancel the contract, you have made no endeavor to interest any person, firm or corporation in the marketing or exploiting of your Core-Min-Oil. A. I have not.
- Q. What was the purpose of making the notes which you have produced [1006] here and which have been marked Exhibits A to H for identification?
- A. Well, when the Spotswood application came up, why, Mr. Gratama told us at that time that we were not to share in the Spotswood application, it was not to be brought under the contract. It was, of course, not our understanding. Then we became suspicious and afraid that something was going to happen to us, so we decided that we would keep track of everything that went on from there on.
- Q. Who decided that "we should keep track of everything"?
- A. Well, Mr. Lydell Peck and myself; I think Mr. James F. Peck, too. We talked to him about it,

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
but Lydell Peck and myself are the two who dis-

cussed it first, I know.

- Q. Well, the controversy between you and Shell regarding the Spotswood-Ruddle application had been settled to your complete satisfaction long prior to the date of your first note, Exhibit A for identification, had it not?
 - A. What is Exhibit A for identification?
 - Q. The first note.

Mr. Hursh: Q. If you want to refresh your memory, take the time to read your notes, Mr. Ruddle.

A. This was after the Spotswood application had been signed; that is when we started, as I recall, to keep these notes, during the time we were discussing the Spotswood application. That is, I think, the first one mentioned.

Mr. Aurich: Q. In other words, the first note was made during the time that you were having a controversy regarding the Spotswood-Ruddle application?

A. It was after we had gone to Shell Oil Company with—that is, Lydell Peck and myself—and there we met Mr. Gratama and McSwain and Mr. Zublin, and I remember Gratama got angry, and so did Zublin, about it, because we insisted that the Spotswood application was a part of the original contract. [1007]

Q. Therefore you and Mr. Peck decided that in view of that you had better be careful about what

was said between you and Shell, and that you had better keep fairly complete records of what transpired?

A. That's right.

- Q. Are all the notes of Exhibits A to H for identification, inclusive, in your own handwriting?
 - A. They are.
- Q. When were the notes made with reference to the dates that they bear, and I am speaking now of the entire group from A to H, inclusive?
- A. Well, they were made just at the time that they were happening; that is, when we came back from one of those meetings, or the following day, why, just as soon as I could I sat down and wrote them, wrote what I remembered of those meetings. This meeting was on January 12, 1939, and I wrote it up January 13, 1939.
- Q. When did you write Exhibit B? By the way, with respect to Exhibit A, can you tell me what time of day you made that note?
 - A. That I made that note?
 - Q. Yes.
- A. I would say it was in the morning, probably when I came down the first thing the next morning—I see nothing here to indicate the time of day, but that would be my guess.
 - Q. When you came down where?
 - A. To Mr. Peck's office, the next morning.
- Q. Were all of these notes made in Mr. Peck's office, or were some of them made elsewhere?
 - A. Well, either there or at my home. If I got

home and there wasn't something else for me to do, why, I generally sat down and wrote up the notes while they were fresh in my mind.

- Q. As we go through these notes if you can tell me where they were made I would appreciate it. Take Exhibit B, where was that note made?
- A. I couldn't tell you; I wouldn't remember the place [1008] where they were written.
 - Q. When was it made?
- A. Well, it was either on January 13, or soon thereafter.
- Q. By the way, during all the times encompassed by these notes, Exhibits A to H, inclusive, commencing on January 12, 1939, and running through until August 9, 1939, Mr. Hackley was acting as your counsel?
- A. Yes, he was, but I didn't show these to him until after they were written. I had the girl in the office take them and type them up, and then I gave him a copy in typewriting.
 - Q. He never saw the handwritten notes?
- A. It is possible that he did see them; I wouldn't say he didn't.
- Q. I mean shortly after the time that they were written; I don't care anything about what he may have seen in the last four or five months.
- A. Well, I would say he did see them right after I wrote them; I told him what I was doing and he said, "I think you should."

- Q. How about Defendants' Exhibit C, when was that written?
 - A. That was written June 24, 1939.
 - Q. Do you recall where that was written?
- A. No. I seen a notation here that I signed, and Lydell Peck read it "on June 24, Saturday morning, 814 Crocker Building"; that was Mr. Peck's office.
- Q. Would that indicate that that was the place at which those notes were written, Defendants' Exhibit C?
- A. Not necessarily, no. I would guess that I wrote this at home, because it is 10 pages long, and I probably handed it to him when he came in that morning; that is only just a guess.
- Q. How about Defendants' Exhibit D, where was that written?
- A. I couldn't tell you; it was written the next day.
 - Q. You mean it was written July 14, 1939?
 - A. Yes. [1009]
 - Q. You don't know when? A. No, I don't.
- Q. How about Defendants' Exhibit E, where and when was that written, if you can recall?
- A. Well, it was written, probably, on July 19, 1939, or on the next day. I know it was written right after.
 - Q. Either that day or the next day?
 - A. Yes, I would think so.

- Q. How about Defendants' Exhibit F, when and where was that written?
 - A. I would say in Mr. Peck's office, probably.
 - Q. On what date? A. On August 11, 1939.
- Q. How about Defendants' Exhibit G, when and where was that written?
 - A. Probably at Mr. Peck's office, August 14, 1939.
- Q. Did you have the same type of paper at your home as you had in your office?
 - A. Yes, I did.
- Q. That is the ordinary legal pads, red lines for margins?
- A. Yes; I used to take a pad like this home from Mr. Peck's office quite often.
- Q. How about Defendants' Exhibit H, Mr. Ruddle; when and where was that written?
- A. That probably was written in Mr. Peck's office on or about August 31, 1939.
- Q. I notice that there are some erasures and interlineations, insertions, changes, et cetera, in Exhibit A to H for identification. What was the purpose, generally, of those changes?
- A. Well, when I went over it I tried to correct the grammar in it and change it so it would sound a little better, because we were going to have them typed up; I didn't change the meaning of them.
- Q. You made many additions of substance, didn't you?
 - A. Yes, but that was all; the only purpose was

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
because I wrote it, and I went back through it and

because I wrote it, and I went back through it and corrected it.

- Q. Struck out some things?
- A. Well, it is possible I took out something, but only to change the grammar of it, or something; [1010] attempted to make it sound a little better.
 - Q. Let us look at some of those changes.
 - A. All right.
- Q. The first one I notice is on the 9th line of the first page of Defendants' Exhibit A for identification. Was that a change made for grammatical reasons only?
- A. Yes. I can't read what I had first, but I had "being called for" at the end of the line, and that should have been "the meeting being called for the following morning."
 - Q. And the "was"?
- A. "... was called for." Apparently I had written it twice and I erased it. Anyway, I changed it.
- Q. Going to "Thursday, January 12, 1939," on the first line, will you look at line 13; there is an erasure there, a change there?
- A. Yes; the word "relationship" is erased there and it is continued on the next line.
- Q. Now, look at page 2 of Exhibit A for identification.
- A. Well, in several instances there I used the words, "A. B. Ruddle," and I erased it and put "I," because I signed the thing.

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- Q. I notice that on the first page of Exhibit A, lines 2 and 3, you have noted, "9:30 p. m. Mr. Mc-Swain phoned," and the same notation appears again on the 4th and 5th lines on page 2. Do you notice that?
- A. One is "9:30 a. m.," and the other is "9:30 p. m."
 - Q. Which is "9:30 a. m."?
 - A. The first one here.
 - Q. May I see the original, please?
 - A. I had "a. m."
- Q. Well, it looks like it might have been 9:30 p. m." At which time was that phone call, do you know? A. 9:30 a. m.
- Q. Then on page 2, lines 4 and 5, your notation is an error when you say that "McSwain phoned at 9:30 p. m."; that relates to the above call, is that right?
- A. Let me see what this is. No, that should be "a. m.," and this one here, it is the same thing, it is [1011] the same reference.
- Q. The notation appearing on the 4th line of page 2 of Defendants' Exhibit A for identification should read "McSwain phoned me at 9:30 a. m.," rather than "p. m."?
- A. Yes; it is the same thing as this, only I just put that same thing in again.
- Q. It should be "9:30 a. m." on page 2, and "9:30 a. m."——

- A. It should be "9:30 a. m." instead of "9:30 p. m."
- Q. Is it your testimony, Mr. Ruddle, that you wrote all of Defendants' Exhibit A for identification at one time?
- A. It looks like I had finished it and then I had thought of something more to go with it.
- Q. Looks like there is a little different pencil used to write the majority of page 2 than there is on page 1 and the first three or four lines of page 2.
- A. That might be, because it is all about the same meeting.
- Q. In other words, you apparently finished it and then thought of something else?
- A. Yes, and sat down and wrote some more of it. It is all about the same subject.
- Q. On Defendants' Exhibit B for identification you state that "After a meeting at 11:00 o'clock a. m."—and this note is dated January 13, 1939—"Mr. McSwain phoned." Where were you when Mr. McSwain phoned you as you there state?
 - A. I would say at Mr. Peck's office.
 - Q. You weren't in Mr. Hackley's office?
- A. Well, it might be. Their offices are close together.
- Q. Will you look at page 3 of Exhibit A? You notice that you end up there by allegedly recording a phone conversation between Mr. Hackley and Mr. Gratama, you having listened in on another phone and Mr. Gratama refers to a meeting which

was, as I understand it, to be held about ten o'clock in the morning. Did you wait at Mr. [1012] Hackley's office for Mr. McSwain to call you back, or do you recall?

A. I would say not.

- Q. You would say you went back to your own office? A. Yes.
 - Q. And that is where Mr. McSwain phoned you?
 - A. Yes.
- Q. I notice there are no notes in Defendants' Exhibits A to H, inclusive, between January 13, 1939, the day of the first note, Defendants' Exhibit A, to June 23, 1939, Defendants' Exhibit C for identification. Have you any notes of any of your conversations or dealings with any of the representatives of the Shell between those two dates?
 - A. Well, this is all I could find.
- Q. You think if you make a further search you may be able to find more?
- A. Well, I tried to find everything; I don't know where I would look.
- Q. You did have conversations, or visits, or telephone calls, or otherwise, with representatives of Shell, between January 13, 1939, and the note of June 1, 1939?
- A. Yes; I was over at McSwain's office several times a week, nearly, all during that time.
- Q. During all that period of time did you make it a point to keep a record of your conversations such as the notes you have produced, Defendants' Exhibits A to H?

A. Oh, yes, those that I thought important; many visits I didn't put down.

Q. In other words, it was a matter of selection; on some occasions you would make notes and on some occasions you would not?

A. If I thought they were important I would put them down. [1013]

Q. What period of time do you cover in recording conversations with Shell and others in your notes, Defendants' Exhibit C for identification?

A. What period of time?

Q. That's right.

A. The text covers several weeks of time.

Q. It covers practically a month, doesn't it?

A. Yes.

Mr. Hursh: Q. Would you care to explain that further? I thought you were going to make a further explanation of your answer.

A. Well, because it refers to certain dates; it refers to things in here that would indicate that it was over some little time.

Mr. Aurich: Q. In other words, in this exhibit, Defendants' Exhibit C for identification, you refer to a conversation you had with Doctor Cleveland of the Philadelphia Quartz Company on May 25, 1939? A. That's right.

Q. You also refer to a conversation you had with Mr. McSwain on the 5th of June, 1939?

A. That's right.

- Q. You, again, refer to a phone conversation had on June 19, 1939? A. Yes.
 - Q. And a phone conversation on June 20, 1939?
 - A. That's right.
- Q. Then on June 24, 1939, when you wrote Defendants' Exhibit C, as you have testified, you were reporting events that had happened over an interval of approximately 30 days prior thereto?
 - Λ. That's right.
- Q. What was the purpose of having Defendants' Exhibit C read by Mr. [1014] Peck?
- A. Well, Mr. Peck was with me when most of these things—at most of these meetings that we had, and he went over it and just stuck his name on it so he would remember that he had read it and could identify it.
- Q. You notice that on the first page of Defendants' Exhibit C for identification you make some reference to the Axelson Foundry in Los Angeles. How long prior to June 5, 1939, had you known of the fact that the Shell Company had attempted to use your Core-Min-Oil at that foundry, and that the result had been unfavorable?
- A. I think shortly after they had tried it there McSwain told me about it.
- Q. Do you recall any conversation with Mr. Mc-Swain at which time the question of taking your Core-Min-Oil east to see what could be done with it there was discussed?

- A. Yes; he discussed that many times, about taking it east.
- Q. Do you recall an incident at or about the time that you were talking with Mr. McSwain, when he was advising you that the Shell Company was going to drop the matter, at which he invited you to go east at the Shell Company's expense and see what you could do with it; that they had been unable to market it?
 - A. No, I don't recall that.
- Q. Would you say that that subject, incidentally, ever occurred?
- A. Well, I don't recall that it ever did. I won't say no, that it hadn't.
- Q. Were you at any time ever invited east by Mr. McSwain to witness a trial, or anything of that sort, of your Core-Min-Oil?
- A. No, not to my knowledge; I don't recall any such thing.
- Q. Did you ever have any conversation with Mr. McSwain when Mr. Spiri was present?
- A. No. It might be that he called Spiri in and introduced me to him, but I don't recall that. [1015]
- Q. You don't recall the conversation, any conversation with Mr. McSwain, at which time Mr. Spiri was present, specifically at this time?
 - A. No, I do not.
- Q. Will you look at page 3 of Defendants' Exhibit E for identification? You notice that you are there recording a conversation you had with Mr.

McSwain at this lunch, I suppose, that we talked about this morning, when you reported to him the results of your conversations with the Messrs. Peck regarding their attitude on Shell's desire to cancel the contract; is that right?

A. That's right.

- Q. You notice that you say in your notes that you told Mr. McSwain that you didn't ask him to lunch to discuss the legal phase of the contract; you didn't feel capable, anyway; but that if he would read some cases, Shellmar—is that "versus," by "v"? A. Yes.
- Q. —Allen Qualley, that you would give him the citations, and that you thought he would get more out of them than anything you could tell him. Where did you become familiar with the case, or cases, of Shellmar versus Qualley?
- A. I don't know whether I got them in Mr. Peck's office or Mr. Hackley's office.
- Q. Did you ever hear of those cases before July 19, 1939? A. Is this July 19?
 - Q. That's right. A. Yes, I did.
 - Q. When did you first hear of those cases?
- A. I think it was during the time of the Spotswood application, that was the first I heard of them.
- Q. They were called to your attention by either Mr. Peck or Mr. Hackley?
 - A. Yes, I think so.
- Q. What were the circumstances of their being called to your attention? A. Well, I was—

- Q. I mean, what was the occasion of Mr. Peck calling to your [1016] attention the case of Shellmar versus Qualley?
- A. Well, they were cases in which contracts were violated, and I called McSwain's attention to that case.
- Q. Why did you call Mr. McSwain's attention to them?
- A. Well, I don't know exactly why it was, but he brought up something about rights to manufacture, or something; I think he used a peach-peeling machine, or something. Pardon me. Maybe it is in this—
- Q. Well, I was going to suggest that you read all of those notes of July 19, 1939, and see if you can tell me why you called Mr. McSwain's attention to the cases of Shellmar versus Allen Qualley.

Let the record show the witness has examined his entire notes, Defendants' Exhibit E.

Can you answer the question now, Mr. Ruddle?

A. Well, it was just a discussion that I had with Mr. McSwain. I took the attitude that they were violating our contract and taking our ideas of the core business, and if they get out something for themselves, that I would feel that we had been robbed, and he cited—he asked me if he had a peach-peeling machine, if he took on a certain thing, and while using it he said he found something that got away—or another way of using a peach-peeling machine, he asked me if he didn't

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
think he had a perfect right to make one, or if I didn't think so, and I told him I didn't think the case was parallel at all, and I thought if he would read the Shellmar cases that he would get an idea of what I was talking about.

- Q. Well, what relevancy did you find between the facts that appeared in the Shellmar case that you referred to and the situation as it existed between you and Mr. Peck on one hand, and Shell on the other, at the time you told Mr McSwain that he would get something out of those cases?
- A. Well, I just related [1017] the reasoning of it.
- Q. Is that the best answer you can make to that question? A. That's right.
- Q. That was the only significance you could find in your referring to the Shellmar case?
- A. Yes; I had read the Shellmar case and I told McSwain that if he would read it he would understand what I was talking about.
- Q. In one of your previous answers you answered that if Shell took your idea of a core business and used it and didn't pay you anything for it, you would feel you were being robbed, or words to that effect.
 - A. That is what I have said here.
- Q. What idea of a core business did you have reference to?
- A. Well, we were told by McSwain they had developed a perfect core oil out of some albino

asphalt and linseed oil, and that they couldn't patent it, and that if they did patent it they would produce it, but because they couldn't patent it, it was just another core oil.

- Q. What idea of a core business did you have in mind when you told Mr. McSwain if they took your idea of a core business you would be robbed?
- A. Well, if they came on the market and took the market, which they would do if they had what he told me they had, they had the quick-drying time, they had everything, every good quality that linseed had, together with an equally fast drying time that this Core-Min-Oil had, why, they would take the market and we would be left without anything.
- Q. Did you feel that you were being robbed when Mr. McSwain told you that they were not going to market this allegedly new core oil that he said they had developed, according to you? [1018]
- A. I don't know whether that is the right word to use or not.
- Q. If you don't understand the question, let me know and I will reframe it. Did you understand the last question?
 - A. Well, I don't know if I answered it or not.
- Q. Go ahead and answer it the best way you can.
- A. If they didn't sell what they developed, of course, I wouldn't think I had been robbed, but

Defendants' Exhibit DDD—(Continued) (Deposition of Allan B. Ruddle.) if they did sell anything, I would feel I was badly damaged.

- Q. If Shell never manufactured and sold a core oil, they were not robbing you of anything, were they?

 A. No, that's right.
- Q. And your only complaint, then, to Mr. Mc-Swain, was that you felt that they should market that core oil?

 A. That's right.
 - Q. Good, bad, or indifferent.
- A. Well, they should have marketed it as soon as they found out how to use a gas free oven; they should have put it on the market. That is our contention.
- Q. Do you believe the facts in the Shellmar case, as you know them, are similar to the facts of the present controversy between you and Shell?
- A. I won't attempt to try to give you a legal interpretation of the Shellmar case.
 - Q. Well, give your own interpretation. [1019]
 - A. I wouldn't know whether they were or not.

Mr. Aurich: Q. Did you know whether the facts in the Shellmar cases were relevant to the facts of the controversy between you and Mr. Peck, on one hand, and Shell on the other, at the time that you had this lunch with Mr. McSwain on July 19, 1939, and called his attention to the Shellmar cases?

A. No, I wouldn't.

Q. You had no knowledge as to their relevancy at all?

- A. No, I wouldn't be capable of telling you how the Shell Company case fits that situation.
- Q. Who told you to call the Shellmar cases to Mr. McSwain's attention? A. No one.
 - Q. That was your own thought?
 - A. That was my own thought.
- Q. Yet you did not have any idea of their relevancy at the time you called them to his attention?
- A. That was with regard to Shell developing something and taking it.
- Q. Well, that doesn't answer the question. We will repeat a trifle. The idea of calling the Shellmar cases to Mr. McSwain's attention was your own idea?

 A. That's right.
 - Q. It was not suggested to you by anybody?
 - A. No.
- Q. Therefore, you must have known something about the Shellmar cases in July of 1939?
 - A. Yes, I had read them.
- Q. You must have seen something in those cases that was relevant to the facts of the controversy as they existed then between you and Shell?
 - A. Right.
 - Q. What were those facts?
- A. Well, we were talking about the Shell developing something out of this contract while they had [1020] this contract, and which I claimed was an infringement on my ideas, and I took to Shell Oil Company, and that I understood the Shellmar cases were infringement cases.

- Q. You thought the Shellmar cases were infringement cases? A. Yes.
- Q. You didn't mention the Shellmar cases to Mr. McSwain as a sort of a warning to the Shell Oil Company? A. Certainly not.
- Q. What did you mean when you told Mr. Mc-Swain that you would not even attempt to explain the law on the subject to him which followed his talking to you about the peach-peeling machine, that if he would read the Shellmar cases he would have a better understanding of your position?
- A. As I recall it, Mr. McSwain said—he cited a peach-peeling machine as comparable to the contract that we had with Shell; in other words, they could take anything in the world that was developed out of it while they had this contract, and they wouldn't have to account to us at all.
- Q. Yes; and you thought that the Shellmar cases expressed law to the contrary?
 - A. That's right.
- Q. You thought that those rulings of the Shellmar cases, as applied to the facts of the controversy between you and Shell, if Shell should develop any sort of a core oil, whether it contained your idea or not, that it would have to pay you for it?
 - A. Yes, that's what I understood.
- Q. That was by virtue of the rulings in the Shellmar cases?
 - A. That's what I told him. I didn't even give

him the rulings of the Shellmar cases; I just told him to read those cases.

- Q. Did you subsequently get the citations of the Shellmar cases and give them to Mr. McSwain?
 - A. Yes.
 - Q. Where did you get the citations?
- A. Well, the books were in Mr. Peck's office; I I don't know whether they came from Mr. Hackley's office, or Mr. Harrison's office, of Brobeck, Phleger & [1021] Harrison. They were in the same office.
- Q. Did Brobeck, Phleger & Harrison ever represent you as attorneys? A. No, sir.
- Q. Now, look at the fourth page of Defendants' Exhibit E, if you will, please. I want to call your attention to the portion of those notes appearing on that page in which you state that at this conversation with Mr. McSwain, that is, this very lunch we are talking about, on July 19, 1939, you told him that you had received information from another source, which you were not at liberty to divulge, to the effect that the core material had turned out to be a wonderful thing for Shell. What was that confidential source of information?
 - A. Where is that?
 - Mr. Hursh: Right here (indicating on exhibit).
 - A. I cannot recall now who it was.
 - Mr. Aurich: Q. What is your answer?
 - A. I can't recall who it was, where I heard that.
 - Q. You have no idea now of the source of in-

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
formation that you referred to on page 4 of Defendants' Exhibit E for identification?

- A. No, I haven't; not at this time.
- Q. You have no knowledge at this time of from whom you received that? A. No, I haven't.
- Q. Was it a representative of the Shell Company? A. I can't recall who it was.
- Q. You believe it might have been some outside source?
 - A. Well, I don't recall now who it was.
- Q. What did you mean where you say that the Core-Min-Oil had turned out to be a wonderful thing for them, the Shell Company?
 - A. I can't remember any words like that at all.
- Q. You don't know what you meant by that, now?

 A. No, I don't.
- Q. Do you know a man by the name of Phillip Short? [1022] A. No, I don't.
 - Q. You never met him?
 - A. No. I know who he is, but I never met him.
- Q. You can't tell me now the meaning of your own words appearing on page 4 of Exhibit E, where you said the core material had turned out to be a wonderful thing for the Shell Company?
 - A. No, I can't recall who told me that.
- Q. Did I understand your testimony previously to be, Mr. Ruddle, that you had not been advised by anyone that the Shell Company was not going into the core oil business?
 - A. Well, I don't recall anybody telling me that.

- Q. Didn't Mr. McSwain state that to you at the meeting on July 19, 1939?
 - A. Well, it might be that he said that.
- Q. Will you look at page 1 of those notes and see if he didn't say that?
- A. It is possible that he said it. Yes, I recall that he told me that at that time, but I didn't take it seriously.
 - Q. You didn't believe Mr. McSwain then?
 - A. No, I didn't.
- Q. Now, if you will look at the first page on Defendants' Exhibit F, right at the top of the page, I notice you state that you went to the Vulcan Foundry, first met Harry Leas and told him that you would like to try something for a core oil binder that was a little different than what you had tried there before. What was that core oil binder that you wanted to try at that time, that was different from what you had tried before?
- A. That shouldn't be "core binder"; it should be "core wash."
- Q. Oh, that whole subject there relates to core wash? A. Yes.
 - Q. And has no reference at all to core binder? A. No.
- Q. Will you look at the very first page of Defendants' Exhibit H for identification, and you will see the name "Stanley Seeley" on the second page thereof; who is Mr. Stanley Seeley? [1023]
 - A. He married Mr. Peck's granddaughter; he

lives in Chicago, and he was out here on a vacation.

- Q. Has he any connection with the core oil business at all? A. None at all.
 - Q. Is he a foundry man? A. No.
- Q. To your knowledge, has he had any experience in foundry work? A. No, he hasn't.
- Q. When you first took your Core-Min-Oil to Shell and had these conversations with Mr. Mc-Swain, did you tell him that your Core-Min-Oil represented a core oil suitable for general foundry use and that it would supersede all other core oils on the market because of the low cost of preparation?

 A. No, I did not.
- Q. Did you make any representation to Mr. McSwain about any saving in sand that might be effected by the use of your Core-Min-Oil over the other core oils then on the market?
- A. No. At the Vulcan Foundry at one time Mr. Leas, of the Vulcan Foundry, said that would be an advantage, to save sand, because you could regulate the friability, and after you broke the castings out of the molds you could carry them to the place you had for the sand, release the sand out, and save that sand so it could be used over again. That is the only thing so far as saving of sand that I recollect.
- Q. Do you have any knowledge as to whether or not that could be done?
 - A. No, I don't know.
 - Q. Throughout your deposition, and in various

notes, you referred to the fact that you felt that your product resulted in shorter drying time, had greater strength to heat resistance, and therefore saved in fuel. Whenever you used that expression, "shorter drying time," you meant the baking of the core in the oven?

A. That's right. [1024]

- Q. And not the drying on the benches?
- A. No.
- Q. At the time of your conversations with Mr. McSwain prior to the signing of the contract in controversy, did you advise Mr. McSwain that you had patent applications pending covering your Core-Min-Oil?
- A. Well, I would think that I did, but 1 don't recall when I told him that.
- Q. It must have been before the contract was signed, because the contract refers to the patent application. A. Certainly, yes.
- Q. I am not asking for the particular instance at which you told him.
- A. Yes, because I haven't any knowledge as to when I told him.
- Q. You didn't let Shell inspect your patent applications, of course, until after the contract was signed?
- A. Until after the contract was signed. There is the reservation of six months.
- Q. After they took up the option they continued to prosecute your application until they elected to cancel the contract? A. That's right.

- Q. Can you recall now when your first discussion was had between you and Mr. McSwain relative to a ready-to-use core oil?
 - A. I do not understand your question.
- Q. You had some discussion with Mr. McSwain about the fact that your Core-Min-Oil came in two containers, or packages, or drums, and that you had to mix it just before using?
 - A. Yes, that's right.
- Q. Then during the course of the negotiations, or, perhaps, after, some discussion was had about trying to make a ready-to-use core oil out of the two constituents, among the so-called Ruddle Solution and asphalt emulsion?
- A. You mean putting it in one package, you are talking about?
- Q. That's right. Can you recall when you first discussed that with [1025] Mr. McSwain?
- A. Yes; I discussed that with him several times, a good many times. He said if they had to sell it in two packages, the way I brought it to them, that they would have to——
- Q. You are getting a little bit away from my question. We have covered all that. I only want to know when, if you can recall, the first time was that you discussed single packaging or a ready-to-use core oil with Mr. McSwain, just about the occasion of that, the approximate time.
- A. No, I wouldn't attempt to fix the time, but it wasn't—

- Q. Was it before the contract was signed?
- A. It is possible that it was; I wouldn't attempt to fix the time.
- Q. Do you think it more likely that it was before the contract was signed, than after, that you had the first discussion with him concerning a ready-to-use core oil? A. Yes, I would say that.
- Q. Did you ever tell Mr. McSwain a number of satisfactory cores had been made with Core-Min-Oil without a failure?

 A. Cores, or castings?
 - Q. Cores.
- A. No, I didn't. I told him that we did have failures because of the gas.
- Q. Did you ever tell Mr. McSwain the number of satisfactory cores that you had made at McCauley's without a failure—this conversation, of course, being before the contract was signed?
- A. You mean our making cores without baking, or being affected by CO² gas?
- Q. No. Did you ever tell Mr. McSwain, for instance, "Why, Mac"—did you call Mr. McSwain "Mac"?
- A. I called him Floyd. I went to school with him.
- Q. Did you ever tell him, "Now, Floyd, we have been going over to McCauley's for quite a period, and we made several hundred cores over there without a failure"?
- A. No, I don't think I ever [1026] told him any such thing.

Q. Did you tell him anything like that in substance? A. No, I never did.

Mr. Aurich: Q. You recall that letter, Plaintiffs' Exhibit Q, dated November 26, 1937, from the "Foundry" to Mr. Lydell Peck, that I showed you this morning?

A. Yes.

- Q. Which was apparently a letter written in response to one by Mr. Peck which gives an estimate of the number of gallons of linseed oil used in the foundry business in the United States?
 - A. Yes.
- Q. Did you ever show that letter to Mr. Mc-Swain?
- A. Yes; Mr. McSwain had that letter in his office.
- Q. Do you recall when it was that you showed him that letter?
- A. Well, it was during the examination that they were making of the product.
 - Q. Was it fairly early, in point of time?
 - A. Yes, I would think so.
- Q. Now, I will show you Plaintiffs' Exhibit 4 attached to the deposition of Mr. McSwain, and ask you if you have ever seen that document before, and, if so, if you know what it is?
- A. Yes. This was a sheet prepared by Mr. Mc-Swain in determining the amount that would be paid for different amounts of gallons sold, of Core-Min-Oil.
 - Q. You mean by that, this was the sheet you

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
figured out the amount of royalties that you were
to get?

- A. Oh, that is also in the complaint, is it?
- Q. That's right.
- A. Is this the sheet that is also in our contract? Can I see the contract?
 - Q. Yes, certainly; look at the contract.
- A. No. It is a sheet that was prepared by Mr. McSwain and showed the prices that [1027] would be paid for the royalties on the solution, and also the asphalt, in two packages, as I recall.
- Q. Do you understand the figures on this Plaintiffs' Exhibit 4?

 A. Let me look at it closely.
- Q. I am merely asking you if you understand those figures represent. If so, I will ask you some questions concerning them; if you don't, I won't waste time to take up the subject.
 - A. No, I don't know what that is.
- Q. You don't recall any conversation with Mr. McSwain concerning Plaintiffs' Exhibit 4?
- A. Yes; I remember that we were discussing the method of selling, what the price should be on those. We were attempting to get the Shell to make as high a minimum as we could, and those were figures that McSwain figured out in the way of minimums. That was the price on asphalt and solution, on selling the Core-Min-Oil in two packages.
- Q. For example, in the first column, as you look at the sheet, I notice "One million".
 - A. Yes.

- Q. Under the column headed "Price," we find "30 cents." Does that mean that you had agreed that your Core-Min-Oil could be sold at a price of 30 cents per——
 - A. Yes; 30 cents per gallon.
 - Q. Right underneath that we find "25 cents."
- A. That means if it was sold for 25 cents a gallon.
 - Q. These were tentative figures?
 - A. Yes, tentative figures.
 - Q. And not actual figures? A. Yes.
- Q. Under the column "Percent" we find "15 percent" A. Yes.
 - Q. What does that mean?
 - A. We were to get 15 percent of the 30 cents.
- Q. The next column, under "Royalty," we find "4.5." What does that mean?
- A. That means four and a half cents. Fifteen [1028] percent of 30 cents is four and a half cents.
- Q. In the next column we find the words, "Royalty on Solution," and immediately under that, "7.32." What does that mean?
 - A. I don't know.
- Q. You don't know what any of the figures mean in the column under the heading "Royalty on Solution"?

 A. No, I don't.
- Q. And the last column, which is entitled "Total Royalty"——
- A. 45,000, which is 4.5 cents of a million gallons.

- Q. In other words, at some point in your negotiations you had tentatively agreed that if Shell had sold a million gallons of Core-Min-Oil at 30 cents per gallon you were to receive \$45,000 therefrom?

 A. Yes.
- Q. That is what the figures underneath "Total Royalty" mean, on down the sheet? A. Yes.
 - Q. Depending on the quantity sold?
- A. The price was to be reduced as the quantity increased.
 - Q. The percentages were to be reduced?
 - A. Yes; down to ten percent.
- Q. In other words, the royalties were to be decreased as the quantities increased?
 - A. That's right.
- Q. Do you recall any discussion with Mr. Mc-Swain concerning Plaintiffs' Exhibit 4?
- A. Just generally; we were trying to arrive at a contract for sale.
- Q. These figures and words appearing on Plaintiffs' Exhibit 4 are part of the preliminary negotiations which culminated in the contract in question?
- A. Yes. It was to continue at ten percent from there. From that figure, 11,000,000, it was to be the same. That was figured up to the first 11,000,000 gallons.
- Q. In other words, if Shell sold 15,000,000 gallons, you were still going to get ten percent?
 - A. Yes. [1029]
 - Q. That was ten percent on the total selling

Defendants' Exhibit DDD—(Continued)
(Deposition of Allan B. Ruddle.)
price of both the solution and the asphalt emulsion?

- A. Yes.
- Q. Down on the bottom of the page, approximately in the center, I find the words "Written by Floyd McSwain." Do you know in whose handwriting those words appear?
 - A. That is Lydell Peck's handwriting.
- Q. This Plaintiffs' Exhibit 4, then, was presented to you and Mr. Peck by Mr. McSwain at some time after you had arrived at the decision to enter into a contract and royalty negotiations were going on?

 A. That's right.
- Q. Who carried on most of the conversations in these conferences between you and Mr. Peck and Mr. McSwain on your behalf? Did you do most of the talking, or did Mr. Peck?
- A. I think Mr. Peck did. The way it was carried on—well, approximately, the way it was carried on, Mr. McSwain would come in with a contract, generally Mr. Gratama was with him, and then we discussed the terms of the contract.
- Q. Mr. Peck is more of the business agent of the Peck and Ruddle combination, is that it?
 - A. I guess that is about it.
- Q. And at all of these conferences when Mr. Gratama was present, and Mr. McSwain, or the two of them together, and you and Mr. Lydell Peck were present, Mr. Lydell Peck carried on most of the conversation on your behalf?
 - A. Well, his father was there a great deal of the

time. His father was not well at all, but he had something to say in the proceedings, anyway.

- Q. Well, generally, those conferences were carried on by Mr. Peck, on the one hand, or his father, Mr. James F. Peck, and the Shell representatives on the other?

 A. That's right.
- Q. You would just interpolate and inject some words occasionally? A. That's right. [1030]
- Q. That is true, generally, throughout all of your negotiations for the contract?
 - A. I would say so.
- Q. Before the contract was signed was any statement made by Mr. McSwain as to the amount of development work that Shell would have to do on your Core-Min-Oil?
- A. Well, it was understood at all times that there was development work that would have to be done.
- Q. Did Mr. McSwain make any representation to you as to the amount of development work that would have to be done?
- A. No, I don't think so; I don't think anybody knew.
- Q. Did you make any representation to Mr. Mc-Swain as to the amount of development work you thought was necessary to perfect your Core-Min-Oil?

 A. No, I didn't.
- Q. At the time you took your Core-Min-Oil to Shell you thought the only development work that had to be done was to eliminate the difficulty that you were having because of obtaining the gas?

- A. Yes, that was the principal difficulty.
- Q. All of the other difficulties, in your opinion, had been overcome by you before you took it to Shell?
- A. Yes, we thought they were just minor and we could easily overcome them.
- Q. Did Shell ever seek your assistance in working out the difficulties that they subsequently encountered in their development of your core oil?
- A. Only at first. I taught them all that I had learned about core oil; that was all that I did.
- Q. Then they went ahead in their development work on their own, so to speak?
 - A. That's right.
- Q. After the contract was signed did you visit any foundries other than the Vulcan Foundry with representatives of Shell?
- A. I went up to the Columbia Steel once with them; I think Ray Harsch was one, and Mr. Zublin, and possibly Mr. Spotswood. I [1031] remember making the trip; just who was there, I couldn't recall.
 - Q. What was the purpose of making that trip?
- A. Well, we thought that it would be especially good for steel castings, and we were interested to get it tried on steel.
- Q. Did you try it at the Columbia Steel Company?

 A. No, not to my knowledge.
 - Q. I mean at the time you were there.
 - A. Oh, no; we just went up and talked that over.

- Q. Who did you talk to up there?
- A. I don't know. The man who had charge of the foundry end of the work.
 - Q. The superintendent of the foundry?
 - A. Yes.
 - Q. Or foreman of the foundry?
 - A. I don't know just what his capacity was.
- Q. Do you recall the conversation that was had at that time?
- A. Well, no; he took us through the foundry and we discussed the cores, and he was very much interested in trying this, I know that.
- Q. Did you ever personally ask him to try any of your Core-Min-Oil?
- A. No; I just went along with the Shell Company.
- Q. So that the only time you ever visited the Columbia Steel was on that occasion?
 - A. That is the only time I was ever there.

Mr. Aurich: I think that is all.

Mr. Hursh: No redirect.

ALLAN B. RUDDLE [1032]

Mr. Hursh: Nothing more.

Mr. Aurich: We will take Mr. Peck's deposition on Wednesday morning.

Mr. Hursh: All right.

Mr. Aurich: At 9:30. We will resume with Mr. Peck's deposition Wednesday morning at 9:30.

Mr. Hursh: All right. [1033]

United States of America State and Northern District of California City and County of San Francisco—ss.

I certify that in pursuance of Oral Stipulation of counsel, on Thursday, May 29, 1941, Thursday, November 6, 1941, Friday, November 7, 1941, and Monday, November 10, 1941, before me, Alfred D. Martin, a Notary Public in and for the City and County of San Francisco, State of California, at the offices of Charles M. Fryer, Esq., in the Mills Tower, San Francisco, California, personally appeared Allan B. Ruddle, one of the plaintiffs herein, produced as a witness on behalf of the defendants in the cause entitled in the caption hereof; and Roy C. Hackley, Esq., and Jack E. Hursh, Esq., appeared as attorneys on behalf of plaintiffs; and Alfred C. Aurich, Esq., and Harold I. Johnson, Esq., appeared as attorneys on behalf of defendants; and the said witness having been by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in said cause, deposed and said as appears by his deposition hereto annexed.

I further certify that the deposition was then and there taken down in shorthand notes by Kenneth G. Gagan, and thereafter reduced to typewriting; and I further certify that the said deposition was read to or by the said witness, corrected by him in any particulars desired, and subscribed by him in my presence.

And I do further certify that I have retained the said deposition in my possession for the purpose of mailing the same with my own hands to the Clerk

of the United States District Court for the Northern District of California, Southern Division, the Court for which the same was taken.

Introduced in connection with the taking of said deposition, and referred to and specified therein, were Defendants' Exhibit R [1034] and Defendants' Exhibit U, both in evidence; and Plaintiffs' Exhibit 1, Defendants' Exhibits A to Q inclusive, Defendants' Exhibit S and Defendants' Exhibit T, all for identification, which are returned herewith.

And I do further certify that I am not of counsel, nor attorney for either of the parties in said deposition and caption named, nor in any way interested in the event of the cause named in the said action.

In Witness Whereof, I have hereunto set my hand and affixed my official seal in my office aforesaid, this 27th day of November, 1941.

[Seal] ALFRED D. MARTIN

Notary Public in and for the City and County of San Francisco, State of California.

My Commission Expires May 16th, 1945.

[Endorsed]: Filed Dec. 1, 1941. [1035]

DEFENDANTS' EXHIBIT No. CCC DEPOSITION OF LYDELL PECK

[Title of District Court and Cause.]

(Deposition of Lydell Peck, taken pursuant to stipulation and pursuant to Federal Rules of Civil Procedure.)

LYDELL PECK,

called as a witness on behalf of Defendants, being first duly sworn, testified as follows:

- Mr. Aurich: Q. Will you state your name, please? A. Lydell Peck.
 - Q. Are you also known as J. Lydell Peck?
 - A. Yes; that is the way I sign my name.
- Q. Will you please state your age, your residence, and your occupation?
- A. Forty-two; residence, 652 Spruce Street, Oakland; and I am Chief of the Division of Fire Safety for the State of California.
 - Q. You are one of the plaintiffs in this action?
 - A. Yes.
- Q. How long have you been connected with the State of California in the capacity that you have stated, just approximately?
- A. Well, since Governor Olson has been in office—two and a half years or three years.
- Q. Prior to that time what was your occupation, Mr. Peck?
- A. Well, I was looking after some property here. Prior to that I was a producer of motion pictures for the Paramount Pictures Corporation, and for

the Fox Film Corporation. Prior to that I was vice-president of the Jib Consolidated Mining Company in Basin, Montana.

- Q. Prior thereto? A. School.
- Q. What was the nature of your schooling, Mr. Peck? [1037]
 - A. I was graduated as a lawyer.
 - Q. What university?
 - A. Washington & Lee University, and Virginia.
- Q. What experience, if any, have you had in the art of core making, or familiarity with foundry practice?
- A. Such knowledge as I picked up when Ruddle was making his experiments, and talking to foundry men at the McCauley Foundry in Emeryville, and foundry men at the Vulcan Foundry in East Oakland, I guess you call it.
- Q. Prior to your visits to the McCauley Foundry with Mr. Ruddle had you ever had any experience in foundry practice? A. No.
- Q. Had you ever been in a foundry prior to your visits with Mr. Ruddle to the McCauley Foundry?
- A. Only one, and that was—I don't know how many months before I went to the McCauley Foundry. Ruddle thought that he could make core oil, and I did not know what core oil meant from sewing machine oil. So he explained that they used it in factories, or foundries, rather, and further, how they made molds. I could not quite get it through

my head they were made inversely. Anyway, he contacted some material that we took to a foundry in Richmond. I do not know the name of it.

- Q. Santa Fe Foundry?
- A. Santa Fe Foundry. It is down in a clump of trees.
- Q. In other words, your visit to the Santa Fe Foundry with Mr. Ruddle was the first occasion—
 - A. The first time I had ever been in a foundry.
- Q. Did you have anything to do with the development of Mr. Ruddle's Cor-Min-Oil? I mean by that, in the actual development of the Cor-Min-Oil itself.
 - A. As a liquid—as a formula?
 - Q. That is right. A. No, I did not.
- Q. I do not mean in connection with any business dealings you may have had with it; I meant in inventing the formula, for example. [1038]
 - A. No, I did not.
- Q. You recall, of course, that sometime in the latter part of 1937 or the fore part of 1938 Mr. Ruddle had a conversation with Mr. McSwain of the Shell Oil Company concerning his Cor-Min-Oil? You recall you heard about it, generally?
- A. Yes, I did, because I was very much interested at the time. I have a very dear friend who is the president of the Standard Oil Company of California, and quite naturally I took this product to him. He made an association with us with the American Bitumuls Company, which is the subsidi-

Defendants' Exhibit No. CCC—(Continued) (Deposition of Lydell Peck.) ary company of theirs that manufactures asphalt emulsions.

- Q. I refer particularly to the time that Mr. Ruddle had conversations with the Shell Oil Company concerning his Cor-Min-Oil. You recall that generally, that incident?
- A. I knew he had seen Floyd McSwain. He had been a lifelong friend of McSwain's. He knew he was over there and knew he was in charge of the asphalt department of the Shell Oil Company.
- Q. That is the occasion I am referring to. Following that occasion, and for some time thereafter, you and Mr. Ruddle had numerous conversations and visits, and talks, with Mr. McSwain and other representatives of the Shell Company?
 - A. Many, many times.
- Q. And when I use the word "Shell Company," Mr. Peck, may we understand that I refer to both of the defendants in this cause, rather than giving them their full corporate names?
- A. Yes. Well, you will have to limit mine to the so-called Shell Oil Company, because I never went to the Shell Development Company at all.
- Q. You did not talk to anyone connected with the Shell Development Company?
 - A. No, I do not know them.
- Q. You did have some conversation with a Mr. Gratama? [1039] A. Oh, yes.
- Q. Mr. Gratama is a Shell Development Company employee. A. And Mr. Zublin.

- Q. Mr. Zublin is also a Shell Development Company employee. A. I did not know that.
- Q. Well, we will include them both, and if you care to make any distinction in your testimony, it is perfectly all right. My only anxiety is to save a few words, rather than giving them their full corporate names.

 A. Sure.
- Q. Did you keep any record in the way of notes, books, memoranda, or other documents, regarding your conversations with any of these men from either of the defendants with whom you had conversations?
- A. No, I did not, only this: I knew Ruddle kept accurate notes, and then when the trouble came up with the so-called Spotswood patent, it put us on our guard, that we may not be getting a square deal with the Shell Company, and from there on I would sometimes note just what the conversations were and what dates they were, where I would listen in on their phone. When Ruddle would be talking to McSwain or some other person, I would perhaps get on the other end of the phone. But Ruddle did write up his conversations with various people that he had dealings with, and he tried to write them up almost—well, as soon as he could after the conversation, and I would read them over.
 - Q. Sometimes you signed some of them?
- A. I signed them, because I wanted it to be signed as of that day. I didn't want to say, "Well, it is 1941, now I have signed them."

- Q. The point is, you have no notes of your own of any conversation? A. No.
- Q. Can you give me the names of all the foundries you have visited since your association with the Shell Company?
- A. I guess that [1040] would be about all. Oh, there was one little brass foundry.
 - Q. The Enterprise?
 - A. Where is the Enterprise?
 - Q. Out here.
 - A. No; it is the Kingwell.
 - Q. Kingwell?
- A. The Kingwell Foundry. I went there after Allan Ruddle had poured a bronze bearing casting, to see the casting, and ultimately we brought it back to the office.
- Q. Do you know anything, of your own knowledge, about the composition of Mr. Ruddle's Cor-Min-Oil, the formula? A. No.
- Q. Do you know a man by the name of Harry Martin?

 A. It isn't Harry Martin.
 - Q. Who? Oh! A. It is Harold Martin.
 - Q. Harold Martin?
 - A. Yes. I have known him all my life.
 - Q. Who is Mr. Harold Martin?
- A. Harold Martin, I think, is the president, or manager, of the Vulcan Foundry.
- Q. Can you recall at this time your first meeting with any representative of the Shell Company?

- A. Well, the meeting with McSwain would certainly be the first one.
- Q. Do you recall specifically your first meeting with him?

 A. Where it was?
 - Q. That is right. A. No.
 - Q. Do you recall when it was?
- A. No. I can fix the dates, if that is what you want.
 - Q. I would like to have you, if you will, please.
- A. We had, as I said, been entering into some negotiations with the Standard Oil Company—well, when I say "Standard," I mean the American Bitumuls Company—and they wanted to take this product on. They had examined it over a period of several months, I think it was, at the McCauley Foundry. They had several of their technical people over there, and they submitted us a contract, and the contract was not acceptable to us. I so told Mr. Collier, [1041] and perhaps I told him in a way that I rather lost my temper. But after that it was cold enough, in our opinion, that Collier suggested that he had a very dear friend, and I imagine it is either—oh, I know who it was, now; it was the head of the American Brake Shoe and Foundry Company, I think it is, here in town, and he wanted me to go see them. And right after that a man named Olson, representing the General Petroleum Company, came up—flew up here from Los Angeles to examine the product. And both of those people were very interested. As a matter of fact, the Amer-

ican Brake Shoe people are still interested in the product. And it was during this time when these other two people were interested that I imagine Allan Ruddle told McSwain, or maybe had told him long before, but told them that negotiations with the Standard were cold, and if he wanted to interest the Shell, they had better get going on that. The reason I know that is the time is because one time during the negotiations of the contract the General Petroleum people had flown up here and were outside, in the outer office, when McSwain was in my office.

- Q. Do you recall anything that was said by you or by Mr. McSwain or by Mr. Ruddle at the occasion of your first visit to Mr. McSwain?
- A. Well, no, I do not. The whole thing is cumulative. The first one—my Lord, I do not know how many hundreds of conversations there were with Mr. McSwain. To place the first one, or the twentieth one, I could not do it, no.
- Q. In other words, you cannot now recall specifically anything that was said by you or by Mr. Ruddle, or by any representative of the Shell Company at any one particular conversation?
- A. Well, I may be able to fix one, maybe; not twenty. I do not know just where it is. I know certain conversations that took place in my office, and I knew certain conversations that took [1042] place in the Shell, in Gratama's office in the Shell, in McSwain's office, but there were many times we

Defendants' Exhibit No. CCC—(Continued) (Deposition of Lydell Peck.) would go down there and come back, or he would come back.

- Q. Do you recall approximately when it was that active negotiations looking toward a contract between you and Mr. Ruddle and the Shell Company commenced? I do not mean the date, but I mean can you recall approximately the time?
- A. They were from the very first day, from the time that the Shell Company displayed any interest in the material at all. They sent some people over—whether McSwain was there I don't know—over to the McCauley Foundry.
- Q. I am trying to fix a period of time. Let us put it this way: A contract was subsequently entered into between you and Ruddle and Shell?
 - A. Oh, yes.
- Q. There were active negotiations and many conferences concerning the form of that contract?
 - A. Oh, yes; yes.
- Q. In my questions for the present I am excluding anything that was said by anybody during that period of time. In other words, I am not at all interested right now in discussions that you had concerning the framing of the actual contract. But excluding that, can you tell me what was said at any time by you, or by Mr. Ruddle, or by any representative of the Shell Company, at any conference, without fixing the specific one?
- A. I think so. I used to meet with—well, I think McSwain and Waller and Ray Harsch. I

think his name is, over at the McCauley Foundry. That is where the first conferences were held, if you are going to call them conferences, when we went over there to watch these castings being made. And I am sure that Waller—I know Waller did—and I think even Ray Harsch took very careful notes, right from the first day. Is that what you mean?

Q. Yes. In other words, I appreciate the fact that in a series of conversations and meetings such as apparently took place between you and representatives of the Shell, it is extremely difficult, if not impossible, to pick out an isolated conference and say such-and-such was said at that conference, and another one; but taking all the conferences you had together, and all the conversations, just what was said by you and what was said by Mr. Ruddle, and what was said by representatives of the Shell, without trying to isolate a conference?

A. Ruddle was working with the chief core man at the McCauley Foundry, Otto someone—I don't know—a great big fellow. Otto has been at the McCauley Foundry for a great many years, and was teaching Allan the so-called art of core-making. I guess. They would make up these various cores. It was Otto's chief function in that foundry to make the Hall-Scott Diesel engines, and in his spare time he would assist Allan and show him how to pat the things. I don't know, you have to make them with a certain amount of hitting them, put-

ting wires in the things, and all that kind of junk. So that is what he would do with Ruddle. Then McSwain, Waller and Harsch, would go over there. They would look at these—

- Q. May I interrupt you, Mr. Peck? I am only asking now for instances at which you were present.
- A. Well, I was present some of these times, and I was not—I mean, sometimes I would even take them over in my car, because Ruddle would be over there.
- Q. I merely wanted to have the record clear that you were relating things that happened while you were there; that is all. A. Yes.
 - Q. Perfectly all right. Go right ahead, please.
- A. At other times I would go over with, or meet Waller or McSwain at that foundry, and we would see the results of castings that had [1044] been poured.
- Q. How many times did you meet Mr. McSwain at McCauley Foundry?
- A. Well, I don't know, but I do know that I went over there with him once to see the results of a casting on what they call a deep well pump that had been poured.
- Q. Do you know whether or not that was the first occasion that Mr. McSwain and Mr. Ruddle went to McCauley Foundry?
 - A. No, I do not.
 - Q. Do you recall the occasion when Mr. Ruddle

first took Mr. McSwain and other representatives of Shell to McCauley Foundry?

- A. I couldn't be positive about that, but I was present, certainly, at an early date, if not the first one I was present.
- Q. That is the point I was driving at. You might have been present on the first occasion?
- A. I doubt it, but I might have. I doubt it. I would not say.
- Q. Do you recall what representations were made by Mr. Ruddle to Mr. McSwain or anyone else connected with the defendants, either of them, concerning his Cor-Min-Oil at any time while you were present?
- A. Of course, this was done long before they went to McCauley's.
 - Q. What had been done long before, Mr. Peck?
- A. Well, Ruddle and McSwain had had many conferences before they went over to the McCauley Foundry as to what the possibilities were in marketing such a core oil.
- Q. At any time while you were present did Mr. Ruddle make any representations to Mr. McSwain concerning his Cor-Min-Oil?
- A. Oh, I think so; surely. While they were there this expert core-maker, as I told you, was pointing out—he had worked with this material—he pointed out to the representatives of the Shell the advantages of this material, because he had made several castings [1045] himself.

- Q. Do you recall any specific statement that Mr. Ruddle made to the representatives of Shell concerning, let us say, the so-called advantages of this Cor-Min-Oil?
- A. Yes; he would explain to them the benefit of having a core oil that would dry as quickly as this material and still give out a perfect casting. Furthermore, that it did not use the various amplifying features that the ordinary sand binder—that it is necessary to put in the sand binder to make the core strong; that it was porous. Those things, of course, have to exist in a core; otherwise the core is no good.

Mr. Hursh: Q. Mr. Peck, when you say "dry," you refer to baking the core, quick baking?

A. Yes.

Mr. Aurich: Q. Do you recall any statement that Mr. Ruddle made to any representatives of Shell in your presence concerning any difficulties that he had been encountering with his Cor-Min-Oil?

A. That who had?

- Q. Mr. Ruddle had been encountering. In other words, did Mr. Ruddle at any time, in your presence, tell Mr. McSwain of any of the difficulties, if any, that he, Ruddle, had encountered with his Cor-Min-Oil?
- A. Well, yes, I do remember something about that, because there were a whole series of cores over there at the McCauley Foundry. It was a table about the size of this table here. Some of the cores

were perfect and others had soft spots in them. Not alone did Otto—this man I am telling you about—point this out, but it had been pointed out to us by the manager of the McCauley Foundry. It wasn't the manager; he is in charge—the foreman, I suppose you would call him. He isn't there any longer. He has his own foundry now. It is down by the 16th Street Depot.

- Q. And Mr. Ruddle would point out these soft cores to Mr. McSwain [1046] or other representatives of Shell, and tell them that was one of the difficulties he was encountering?
- A. I am not certain that Ruddle pointed those out himself or whether Otto pointed them out, or whether this foreman pointed them out. We did know that certain cores would show up with this soft spot on them. And the only thing we knew about it, of course, not being people possessed of a library or anything—it was all practical work done—we would know at noon time when they would turn off the ovens, or at least the ovens—Otto had his own oven—turned that off, and we put those cores in, that they would come out perfectly. Sometimes that was even done at night when they closed the foundry up. There would be a lot of heat in the oven and they would put in cores, and in the morning take them out.
- Q. Do you recall any other difficulties that Mr. Ruddle told any representative of the Shell that he. Ruddle, had experienced with his cores?

- A. Yes.
- Q. Can you name them?
- A. He had found—all this stuff, mind you, was told to Ruddle by this expert, as to what he had to overcome in order to present what you would call a perfect core. Yes, there was. After the casting would be made, it would be necessary many times to dig in to get the sand binder out. The sand did not readily disintegrate.
- Q. Did Mr. Ruddle tell Mr. McSwain or other representatives of the Shell of that difficulty?
 - A. Yes.
- Q. Was there any other difficulty that you recall Mr. Ruddle told any representative of Shell that he, Ruddle, had experienced with respect to making cores with his core oil?
 - A. No, not that—
 - Q. Not that you recall?
 - A. No, not that I recall.
- Q. Have you ever made a survey of the number of foundries in the United States?
- A. A survey? No. The Shell Oil Company was [1047] supposed to do that, according to McSwain. That was one of the first things they would do before they attempted to market or attempted to take on a product; they would attempt to find the potential market for that product.
- Q. You never made any survey yourself, outside of any Shell had made for you?
 - A. They promised—not alone promised, but that

was one of the functions of the company—to market a product they would certainly have to find out their market.

- Q. I am excluding Shell from my question; specifically outside of what Shell said they would do——
- A. All right. I wrote to the Foundry Magazine, and they wrote to me the letter that you have here in evidence.
 - Q. That was a letter concerning——?
- A. Linseed oil, I think, as to the amount of oil sold.
- Q. That was not a letter concerning the number of foundries in the United States, was it?
- A. No. But I will tell you what—I do not know that there is any way of getting that, as to the exact number of foundries, but I did write to the Foundry Magazine asking that information at one time, and the next thing I got was a phone call from the representative of the Young Oven manufacturers from Detroit, Michigan, I think. Now, I looked for that letter and I can't find it, but I did have my secretary write down, or type down the names of some of these foundries. These people are just manufacturing-many, I suppose, manufacture ovens. And they did name off foundries such as Canadian Pacific Railroad, the Norfolk & Western, Westinghouse Electric Company, the Crane-what do vou call the Crane? Is it the Crane Company, Crane Fixture Company?

Mr. Hursh: Crane Plumbing & Fixture Company.

A. (Continuing): I think they sold one to Stanford University. [1048] There is one up in Vancouver. There is one at Keokuk, Iowa. And I think there is the General Electric. And there is some other big railroad in there, too. Is that what you want?

Mr. Aurich: Q. Yes, that is the answer to my question. In other words, if I understand you correctly, the Young Oven Manufacturing Company——

- A. Oven Manufacturing Company.
- Q. —apparently in response to your letter to the Foundry, wrote you and gave you this list of foundries?
 - A. They have a representative out here.
 - Q. I see. And he called you up? A. Yes.
- Q. Do you know the number of foundries that are located on the west coast?
- A. Well, no, but—you ask me if I know; I do not know any of these things as a positive fact. but I do know from the foundry men that there is a very, very small percentage—maybe only eight or ten percent of the foundries of the United States that are on the west coast.
 - Q. The rest are located where?
- A. I think in the Middle West and down around Pittsburgh and in the South.
 - Q. And I suppose that that being true, that you

and Mr. Ruddle contemplated that the greater amount of your Cor-Min-Oil would have to be sold in parts of the country other than the west coast, to produce a profitable market?

- A. Oh, surely. The Shell knew that. We explained that to them. They explained it to us. They were going to set up different manufacturing plants. They even had guessed as to where they would establish them.
- Q. Who, from the Shell Company, gave you this information as to their making a survey of the number of foundries in the United States and setting up of various offices throughout the country?
- A. Floyd McSwain and, I think—let's see—somebody else—he [1049] wanted to take charge of it. He told us once that they—I think Mr. Berlitha at that time was the president of the Shell Company, and he had moved to the Middle West—but anyway, there was going to be set up a sub-company to handle this particular thing. McSwain was very anxious that he be assigned to this particular work, wherever this was to be set up in the Middle West.
- Q. Do you recall where it was going to be set up in the Middle West?

 A. No, I do not.
- Q. Did you ever make a survey of the foundries in the parts of the country other than the west coast to determine the amount of Cor-Min-Oil that could be sold in those foundries?
 - A. No, I did not, because that was a problem.

that was one of the reasons we entered into a contract with the Shell Company. It was to get a sales outlet. We did not have any money to have a sales organization.

- Q. Do you know whether or not Shell ever made such a survey?
- A. Well, they told us they certainly would do so. I mean, as a matter of fact that was one of the things that the contract was predicated on—their survey as to the market for a core oil.
 - Q. Did Shell ever—
- A. I know one day down in the claims office that he had—I do not know whether it was a Foundry Magazine, or something—but in it—they had sent it down—it was a huge oven, indirect heated oven. I am quite sure it was the General Motors Foundry that had put this—it is on a conveyor belt system, that would make up these cores, time them, and when the belt reached the other end of this oven, why, the cores would be completed. And they also had made sketches, even over at the Vulcan Foundry, as to what it would cost and what could be done over there to make their ovens indirect heated ovens. [1050]
- Q. That was one of the big obstacles that had to be overcome, was it? That is, you had to sell Mr. Ruddle's Cor-Min-Oil in foundries that had indirect heated ovens? A. That is right.
- Q. And it could not be sold or used in foundries that had direct heated ovens?

- A. That is right; and the answer to that with the Shell Company was—well, as Mr. Waller put it, that the innovation of this core oil was the difference between a candle and an incandescent light, and the foundries would be only too willing to change over their ovens, because they would have to meet the savings that were in the Ruddle core oil.
- Q. You, of course, had no knowledge of this, as to the amount of money that would be involved in the changing over of a foundry from a direct fired oven to indirect fired ovens?
- A. Well, only this, Mr. Aurich: I do know the foundry business is highly competitive, and if a man can make a saving of 15, 20, or 30 percent, in the ordinary business practice, he would certainly change his ovens to get the business.
- Q. My point was, did you have any knowledge of your own as to the cost of making a change such as from direct to indirect fired ovens?
 - A. None whatsoever, no, I did not.
- Q. Did you know at the time that you entered into this contract with the Shell Company how core oils were sold in foundries, let us say, other than on the west coast?
- A. Well, this O'Neil, if that is his name—I am quite sure it is O'Neil, although I am not going to swear to that—this fellow who was in charge of the McCauley Foundry had been East many times. I think the McCauley people had sent him East

many times. But the big foundries, they buy—he told us they bought their core oils in tank cars.

- Q. By the way, do you know whether there are any large foundries [1051] on the west coast at all?
 - A. Yes;—
- Q. By "large," I mean as compared to the foundries in the Middle West.
- A. I think now there is, because the Big Six Companies recently have taken over the Joshua Hendy Foundry down here, and I think that is supposed to be a very large one.
- Q. Outside of that foundry, are there any, what you might term, large foundries?
- A. I think there is a very large brass foundry in Seattle.
 - Q. Any others?
 - A. That is all I know.
- Q. Did either you or Mr. Ruddle have any part in fixing the market price at which your Cor-Min-Oil was to be sold by the Shell Company, or was that a matter left to Shell's discretion?
- A. It was not left to their discretion, by a long ways; but it ultimately resolved itself into somewhat that. We wanted in the contract—as a matter of fact, insisted that we have a minimum royalty. I am quite sure it was \$100,000. And McSwain and Gratama damned near went out of the Shell Oil Company Building roof. They said the Shell Oil Company did not enter into any contracts that gave a monetary royalty of that kind. So we said, "That

is the impasse of this." So McSwain then proceeded to draw up a schedule of what he considered would be a fair marketing schedule, which would result in practically the same thing, because of the establishment of a minimum gallenage that is now in the contract.

- Q. Do you recall now, offhand, the price at which Mr. McSwain estimated the Cor-Min-Oil would be sold to the various foundries?
- A. Well, I know this: that he said, "You can certainly rely on the Shell's getting every dime that they could get out of it," and the more they got, of course, the more we got. But at one stage of this proceeding—this was long after the contract had been negotiated—they thought they had—they tried to emulsify the [1052] two products, or bring them together in one package, and thinking they had the thing perfected, they took it to some foundry in Los Anglees. I do not know what the results of their work down there were, but I understand from McSwain that the emulsion broke and, of course, was not much good. But he said he was very pleased with his trip to Los Angeles for one reason, if no other, and that was the head of this foundry had asked him how much this material would cost, and he said it would cost approximately 50 cents a gallon. So McSwain said, "He didn't buck at all, so that is at least something to start on in price."
 - Q. The contract which you have with Shell,

which is here in controversy, if I remember correctly—and I want you to feel free to look at it, Mr. Peck—provides that the royalty that you and Mr. Ruddle were to receive was based upon the gallonage of the Cor-Min-Oil that Shell would sell?

A. Yes.

Mr. Hursh: Just a second. I object to the question. The contract speaks for itself, and any testimony endeavoring to interpret the contract at this time is improper and objectionable. And I want my objection to go the whole line of questioning regarding the written contract that is in existence between the parties.

Mr. Aurich: I will be glad to have that under standing.

- Q. That is, if Shell sold a million gallons of Cor-Min-Oil the first year, you and Mr. Ruddle were to receive 15 percent—
 - A. Everything that went in.
 - Q. —of everything that went in?
 - A. That is right.
- Q. And the market price of the Cor-Min-Oil was a matter that Shell was going to have to determine from a manufacturing standpoint, selling costs, et cetera?

 A. That is right.
 - Q. Did either you or Mr. Ruddle— [1053]
- A. You must remember, too, at this time, Mr. Aurich, the Shell was having a price war on asphalt emulsions. It seems—I do not know—they were having trouble with the American Bitumuls

Company on some patent case, and every little operator was then starting in to make asphalt emulsions.

- Q. Did either you or Mr. Ruddle have any part in determining to whom Shell should sell Mr. Ruddle's Cor-Min-Oil?

 A. To whom?
 - Q. Yes.
- A. They could sell it all over the United States and in Europe, if they saw fit.
- Q. Let us take a foundry, for illustration, by the name of Jones Foundry. If Shell had decided, for reasons best known to itself, that it would not sell any of Mr. Ruddle's Cor-Min-Oil to the Jones Foundry, that would have been no concern of yours?
- A. Well, they were very anxious, they told us, to get this oil in such a shape that they would have a monopoly as against every other company.
- Q. But if they, for some reason, decided to sell——
- A. They said they had salesmen all over the United States who would contact every single foundry within the United States.
- Q. But if they, for some reason or other, decided to sell a million gallons to Foundry A, and only a hundred thousand gallons, we will say, to Foundry B, that was the Shell's prerogative, was it?
- A. Well, I don't know exactly about that. This thing came up—this is going to be a story, now, if you want that——

Q. Yes.

It may be a fairy tale and it may not, but we had heard at one time the American Tobacco Company had bought a patent on a little tip that went into the top of the sack of Bull Durham. Bull Durham being a cloth sack, they would insert this tip and tie the string [1054] around this tip, so that when you squeezed it in making the cigarette you would get so much tobacco and no more. Well, that was a great saving in tobacco, so the American Tobacco, we had heard, bought this patent up and then put it on the shelf. And we said that we would get away from any such condition as that, that the Shell might possibly entertain by developing something of their own and putting our stuff away, and then going ahead and selling their prodnet.

Mr. Aurich: Q. I call your attention to a letter which is attached to your complaint, marked Exhibit G, the original of which was signed by you and sent to the Shell Oil Company, the letter being dated September 6, 1939. By looking at that letter, Mr. Peck, can you tell me who wrote it?

A. (After examining document): I think this was written after a conference with ourselves and Mr. Hackley.

Mr. Aurich: Q. Do you recall whether the letter was written during the conference, or was written by you as a result of the conference?

A. Well, now, that I don't know. My dad at that

time was not in any too good health, and many times he would sketch out certain points, and then perhaps take them up with, I think, Mr. Hackley or Mr. Townsend—at that time it was Townsend & Hackley—and I think that is written by them.

- Q. Written by Townsend & Hackley?
- A. I think so.
- Q. Following the receipt of the letter dated July 26, 1939, from Shell to you and Mr. Ruddle. in which the Shell Company stated that they were cancelling the contract, which letter is marked [1055] Exhibit D attached to the complaint, what, if anything, have you done toward the manufacture and sale of Mr. Ruddle's Cor-Min-Oil?
 - A. Haven't done anything.
- Q. Paragraph 24 of the complaint, which is verified by you, page 11, lines 24 to 26, alleges that you "have been damaged and injured in an amount in excess of one hundred thousand dollars (\$100,000)." Will you tell me how you arrived at the amount of \$100,000 as there set forth?
- A. I would say this is in excess of \$100,000; I would say it would be many times that.

Mr. Aurich: Q. In other words, the figure of \$100,000 as set forth in the portion of the complaint to which I have directed your attention, is perhaps the minimum amount?

- A. That certainly would be, in my estimation, after knowing somewhat of the market.
 - Q. The point I wanted to find out, Mr. Peck,

was how do you arrive at the figure of \$100,000 as the minimum amount of damages that you and Mr. Ruddle have suffered because of the cancellation of the contract by Shell?

- A. Well, I really do not know. This is more or less an arbitrary figure put down. My contention, of course, is that it is many times \$100,000, and the figures of the market will substantiate that. But I understand that there will perhaps be another damage suit brought here at another time. [1056]
- Q. What figures of what market do you refer to?
- A. Well, I am taking the figures of the market that were given to us by the Foundry Magazine.
- Q. In other words, the Foundry Magazine sent you a letter in which they set forth that there was an estimated total of core oil requirements of the entire foundry industry of 23,520,000 gallons of core oil, is that right? A. Yes.
- Q. That is one of the factors upon which you will predicate your allegation that you have been damaged at least to the extent of \$100,000?
 - A. Oh, yes.
- Q. How much of the estimated core oil requirements of the entire foundry industry did you assume would be taken by Mr. Ruddle's Cor-Min-Oil?
- A. Well, of course, we naturally assume that ultimately we would get it all, that the drying time of this product would necessitate our cornering

of the market; but certainly we would be entitled to half of it.

- Q. In other words, you figure conservatively, that Mr. Ruddle's Cor-Min-Oil would displace at least half of the entire output of the core oil sold to foundries?
- A. Yes, I certainly do, because the invention is revolutionary; it is something entirely new. And, as I say, I quoted Waller here a while ago, it is just as different as between using a candle and an electric light.
- Q. By the way, in one of your previous answers, Mr. Peck, you mentioned something about another damage suit being brought at some subsequent time. To what did you refer in that answer?
- A. Well, I don't know. We may have to—this contract here is for five years, as I understand it. It is for performance. If we ever have to have an accounting, we will have another suit.
- Q. By "another suit," you simply mean that it may be necessary to have another suit to establish the amount of your damages [1057] following an adjudication in the present action as to Shell's right to cancel the contract, is that what you mean?
 - A. I think that is what is in contest right now.
- Q. What is in contest right now is whether or not Shell had the right to cancel the contract.
 - A. No; we are suing for specific performance.
- Q. And then you assume that if that is granted, it will be necessary to bring another action for

damages to recover whatever damages you may have suffered, is that what you meant?

- A. We will bring a suit, no doubt, for everything that the Shell has.
- Q. Provided, of course, you do not get all that you are entitled to by virtue of this action?
 - A. That is right.
- Q. Outside of the fact that the foundry told you that the estimated core oil market per year was 23,000,000-odd gallons, and outside of the fact that you hoped to be able to take at least 50 percent of that market, are there any other factors which entered into your statement that you have been damaged at least in the amount of \$100,000?
 - A. In excess of \$100,000.
- Q. Well, in excess of \$100,000. With that modification in my question, will you see if you can give me an answer, please?
- A. Well, if I remember, you were asking about taking the figures of the Foundry people.

Mr. Aurich: Yes. My question is this:

- Q. Outside of the fact that the Foundry Magazine advised you that the estimated amount of core oil used in foundries per year was 23,000,000-odd gallons, and outside of the fact that you hoped to be able to take at least 50 percent of that market, what other [1058] factors are there that enabled you to arrive at the conclusion that you have been damaged in excess of \$100,000?
 - A. I would say that was the main factor, be-

cause the Shell people concurred in that, too. They had examined that. We had turned over that letter from the Foundry to them, and they had gone into the market. They told us that those figures were very conservative.

- Q. You knew, of course, that one of the ingredients of Mr. Ruddle's Cor-Min-Oil was sodium silicate? A. Yes.
- Q. Did you ever make any investigation to determine what market, if any, there might be for a core oil containing sodium silicate? A. No.
- Q. In Paragraph 21 of your complaint, commencing on page 10, lines 29 and 30, and on line 1 of page 11, you allege that Shell "has refused to account to plaintiffs in any manner whatsoever for royalties accruing under the contract." Will you enumerate the royalties which accrued under the contract and which Shell refused to pay to you?
- A. Yes. I think that the royalties—there is a minimum gallonage. Now, I told you that the Shell would not—I told you about Gratama and McSwain hitting the roof when we mentioned money. And they assured us we would have to rely on the Shell. The Shell never engaged in that type of a contract. And so they worked out their—we didn't work it out—they worked it out, the minimum gallonage royalty—we call it a royalty; anyway, a minimum gallonage basis, and McSwain brought that over, and it is in the contract, I think.

Mr. Aurich: Q. You believe the contract pro-

vides for a minimum amount of royalties that were to be paid to you and to Mr. [1059] Ruddle under the contract? A. Yes.

- Q. And those minimum royalties that you believe are included in the contract are the royalties that you referred to in the portion of the complaint to which I have directed your attention?
 - A. Well, I suppose so.
- Q. Will you look at it and see if you can locate any others?

 A. I don't know.
 - Q. It is your complaint, Mr. Peck.
- A. The royalties are those royalties for the sale of Cor-Min-Oil.
- Q. What royalties did Shell receive that they had not accounted to you for?
- A. I am sure I don't know what royalties they have received.
- Q. Do you know whether Shell has received any money from the sale of Cor-Min-Oil?
 - A. No, I don't know.
- Q. Do you know whether Shell has received any money whatsoever from the sale of any type of a core oil?

 A. That I don't know.
- Q. I will now call your attention to Paragraph 17 of your complaint, the portion appearing commencing on line 13 to line 17 of page 9, which reads:

"That defendants acting generally and severally, threaten to disclose, and upon information and belief are alleged to have disclosed to

the public in general, portions or all of said confidential disclosures of plaintiff to said Shell Oil Company and to defendants."

To whom did either of the defendants herein disclose portions or all of such confidential disclosures referred to in that portion of your complaint?

A. Well, we do not know who they were disclosing it to, but we [1060] would run across people who were dealing with it. They must have known something about—Shell must have disclosed it and turned it over to the Shell Development Corporation.

Mr. Aurich: Q. Who disclosed it to the Shell Development Corporation?

- A. I don't know; they knew about it.
- Q. Were you present when Mr. Ruddle actually disclosed his so-called secret solution to the defendants?
- A. I am not sure whether I was or was not. I do remember going up to Martinez, where Ruddle showed Spotswood—and McSwain was then present—how to make this solution. And then later Spotswood tried to compound it himself and failed in doing it. We went back again.
- Q. —that Mr. McSwain and Mr. Gratama were present, in addition to yourself, your father,

and Mr. Ruddle, and that following the signing of that contract on that occasion he, for the first time, disclosed to those gentlemen his so-called secret solution. Do you recall that?

- A. Yes, I think I do, but I am not sure that it happened right there, because—well, I do not think my father went—we went downstairs to the Nugget Cafe, underneath the Crocker Building, and at that time supposedly celebrated the signing of a contract. And then I know that the formula was discussed, and whether Allan wrote it out then, I don't know; I think maybe he did. I do not know anything about this solution.
- Q. I am not going to ask you any questions about the solution at all. The point I am trying to find out is—
- A. They had asked for it before the signing of the contract, I know that. [1061]
- Q. But Mr. Ruddle had refused to give it to them?
 - A. Yes, he had refused to give it to them.
- Q. At the time he made the disclosure of his so-called secret solution to Shell, Mr. Gratama and Mr. McSwain were present, is that your recollection?

 A. Yes.
- Q. And you did not know that Mr. Gratama was a representative of the Shell Development Company?
 - A. No. I knew he was an attorney up there in

Defendants' Exhibit No. CCC—(Continued) (Deposition of Lydell Peck.) the Shell. He was a patent attorney, or something,

in the Shell.

- Q. Do you know whether or not Mr. Ruddle ever disclosed his so-called secret solution to Mr. Zublin?
- A. I think he did. I think it was, at least, taken for granted—let us put it—when Zublin and Gratama and these people were called in on these conferences—I guess it came from Martinez—I I don't know whether he ever told Zublin himself, but Ruddle could answer that.
- Q. Do you recall that Ruddle's patent applications were turned over to Mr. Gratama and Mr. Zublin for prosecution?

 A. Yes.
- Q. And those applications disclosed Mr. Ruddle's so-called secret solution—just generally—without regard to a specific formula?
 - A. I suppose so.
- Q. Can you name anyone else to whom either the Shell Company or the Shell Development Company disclosed any portion of Mr. Ruddle's alleged confidential disclosure?
- A. No, I do not know. All I know is what I hear, that there were several people working on the material—or substantially working on it, anyway—over at Emeryville, at the Shell Development Corporation. I don't know. There was a Doctor Wright and Spiri—I suppose they knew, being chemists, that they must have some tools to work with. So they can't be in the dark working for a corporation

of that size without knowing what the Hell they are doing. [1062]

Q. In other words, is it a fair statement to say that the only persons you know of as to whom either of the defendants disclosed Mr. Ruddle's alleged confidential disclosure were employees and other representatives of the defendant, such as Wright, and Zublin, and those people?

A. Yes.

Q. Is that all the people you have in mind by the portion of the bill of complaint that I have called your attention to?

A. Yes.

Mr. Aurich: I think that is all, Mr. Peck.

Mr. Hursh: No cross examination.

Mr. Aurich: Q. Mr. Peck, will you waive the reading and signature of your deposition?

A. Yes.

Mr. Hursh: So agreed.

(Duly Verified.) [1063]

[Endorsed]: No. 10280. United States Circuit Court of Appeals for the Ninth Circuit. Lydell Peck and Allan B. Ruddle, Appellants, vs. Shell Oil Company, Incorporated, a corporation, and Shell Development Company, a corporation, Appellees. Transcript of Record. Upon Appeal from the District Court of the United States for the Northern District of California, Southern Division.

Filed October 9, 1942.

PAUL P. O'BRIEN

Clerk of the United States Circuit Court of Appeals for the Ninth Circuit.

In the United States Circuit Court of Appeals
For the Ninth Circuit

No. 10280

LYDELL PECK and ALLAN B. RUDDLE,
Appellants,

VS.

SHELL OIL COMPANY, INCORPORATED, a corporation, and SHELL DEVELOPMENT COMPANY, a corporation,

Appellees.

STATEMENT OF POINTS ON APPEAL

The above named appellants, in compliance with Rule 19 of the Rules of the above entitled Court, hereby present the following statement of points upon which appellants will rely in this appeal.

T.

The District Court erred in finding that defendant Shell Oil Company diligently attempted to perform all of the terms and conditions of the license agreement of April 8, 1938, between said Shell Oil Company and appellants.

II.

The District Court erred in finding that the sodium silicate core oil licensed to the Shell Oil Company under said agreement of April 8, 1938, proved to be a practical failure, unmarketable and of no use or value to anyone.

III.

The District Court erred in finding that there was no evidence whereby any damage or injury, legal or otherwise, can or will result, or has resulted, to appellants, or either of them, by virtue of the attempted cancellation by Shell Oil Company, Incorporated, of the license agreement of April 8, 1938.

IV.

The District Court erred in finding that at no time was there any confidential disclosure by Lydell Peck or Allan B. Ruddle of the idea of employing asphalt emulsion or any petroleum product in or as a core oil to Shell Oil Company, the predecessor of Shell Oil Company, Incorporated, or to Shell Development Company, or to any of the employees of said corporations.

V.

The District Court erred in concluding that said license agreement of April 8, 1938, between appellants and Shell Oil Company, predecessor of defendant Shell Oil Company, Incorporated, and all of the provisions thereof, were unenforceable because of failure of consideration.

VI.

The District Court erred in concluding that said license agreement of April 8, 1938, between appellants and Shell Oil Company, predecessor of appellee Shell Oil Company, Incorporated, was impossible of performance.

VII.

The District Court erred in concluding that Shell Oil Company, Incorporated, the successor of Shell Oil Company, was justified in cancelling said license agreement of April 8, 1938.

VIII.

The District Court erred in concluding that at no time did any confidential relationship exist between the appellants and either Shell Oil Company, predecessor of Shell Oil Company, Incorporated, or Shell Development Company with respect to the use of asphalt emulsion or any petroleum product in a core oil, and in concluding that appellees have violated no confidential relationship.

TX.

The District Court erred in concluding that the

complaint in this action failed to state facts sufficient to constitute a claim upon which relief could be granted against either of appellees.

X.

The District Court erred in failing to find that appellees, and each of them, failed to perform the covenants and conditions of said license agreement of April 8, 1938.

XI.

The District Court erred in failing to find that appellees, and each of them, made no attempt to market "Core-Min-Oil" and other compositions for foundry use under and in accordance with the provisions of said license agreement of April 8, 1938.

XII.

The District Court erred in failing to find that "Core-Min-Oil" and other foundry products disclosed in U.S. Letters Patents, Nos. 2,193,346; 2,204.913 and 2,214,349, and covered by the license agreement of April 8, 1938, were in fact useful and marketable.

XIII.

The District Court erred in failing to find that the Shell Oil Company had developed a marketable core oil which came under and within the provisions of the license agreement of April 8, 1938.

XIV.

The District Court erred in failing to find that the disclosures by Peck and Ruddle to the appellees,

and each of them, were in confidence, and should have so been kept and maintained by appellees.

XV.

The District Court erred in failing to find that the form of "Core-Min-Oil" developed by Shell Oil Company, employing albino-asphalt, asphalt, or similar extract fractions, was a useful and marketable core oil and fell within the provisions of the license agreement of April 8, 1938.

XVI.

The District Court erred in failing to find that Shell Oil Company had developed a commercially practicable and marketable core oil, all as is set forth, among other places, in the reports of Shell Oil Company, Exhibits 53, 54, VV, WW and XX.

XVII.

The District Court erred in not ordering and directing appellees specifically to perform the contract of April 8, 1938.

XVIII.

The District Court erred in failing to find that even after attempted cancellation of July 26, 1939, of the license agreement of April 8, 1938, appellees continued, and at the time of trial were continuing, their operations under said agreement.

XIX.

The District Court erred in not rendering a judgment in favor of appellants and in not order-

ing an assignment to appellants of all of the developments relating to core oils made by appellees Shell Oil Company and Shell Development Company, and by failing to grant to appellants exemplary damages, costs and other relief equitable in the premises.

XX.

The District Court erred in awarding costs to appellees.

XXI.

The District Court erred in showing evident prejudice against appellants and the case of appellants during the course of trial, both in rulings and in gratuitous statements. Among the statements upon which this assignment is based, showing prejudice or want of judicial viewpoint by the trial court, are the statements appearing in the trial transcript at pages 4, 5, 231, 232, 236, 244, 248, 249, 251, 252, 256, 261, 264-7, 328-31, 334, 345, 336-43, 373, 374, 378-9, 386, 396-401, 405, 409, 414, 415, 416-418, 429, 456, 471, 472, 474, 476, 478, 482-484, 485, 491, 492, 503, 550, 569, 570, 572, 574, 590, 591.

XXII.

The District Court erred in failing to admit in evidence Plaintiffs' Exhibit 6 for identification.

XXIII.

The District Court erred in the ruling appearing on page 66 of the original transcript of record in this cause.

XXIV.

The District Court erred in the rulings appearing at pages 99-100, in the original transcript of evidence.

XXV.

The District Court erred in permitting the introduction into evidence by appellants of Exhibit T, without requiring the introduction into evidence of the exhibits, a part thereof which were thereto annexed.

XXVI.

The District Court erred in ruling, on page 141-143 of the original transcript in this case, that the question of novelty was an appropriate one upon the pleadings in this cause — that is, novelty of appellants' disclosure to appellees.

XXVII.

The District Court erred in compelling the witness Ruddle to testify as an expert on market prices of core oils, original transcript, pp. 184-185.

XXVIII.

The District Court erred in compelling the witness Ruddle to read into the record part of the document Exhibit C (not in evidence) to the Ruddle deposition, Exhibit T in evidence, and in refusing to order that the entire document be put in evidence (original record pp. 195-196).

XXIX.

The District Court erred in failing to admit into

evidence United States Letters Patent No. 1,900,211 and No. 1,900,212, offered for identification as Plaintiffs' Exhibits 35 and 36.

XXX.

The District Court erred in admitting into evidence defendants' exhibit Z and AA for the reason that said exhibits were incomplete, as shown by the record.

XXXI.

The District Court erred in refusing to admit into evidence the deposition of J. F. McSwain, offered in evidence by appellants as Exhibit 38 for identification.

XXXII

The District Court erred in refusing to admit into evidence the exhibits 39, 40, 42, 43, and 44, and in all rulings relating to said exhibits, and in limiting the testimony with regard thereto.

XXXIII

The District Court erred in failing to grant the motion to strike appearing at page 396 of the original transcript of this cause.

XXXXIV

The District Court erred in permitting the witness Dietert to testify before the court without first being sworn and without permitting counsel for appellants to cross-examine the witness in regard to said unsworn statements.

XXXV.

The District Court erred in making the rulings appearing at page 17 and 18 of the original transcript of record in this cause.

XXXVI.

The District Court erred in admitting into evidence defendants' exhibit E, and permitting testimony with regard thereto over the objection of appellants.

XXXVII.

The District Court erred in permitting appellees' witness Dietert to testify as an expert on the subject of core washes without requiring qualification of said witness on the subject.

XXXVIII.

The District Court erred in failing to permit introduction into evidence of plaintiffs' Exhibit 56, offered for identification and in failing to permit cross-examination of appellees' expert Dietert with regard to text thereof.

XXXIX.

The District Court erred in permitting witness Spiri to testify over the objection of appellants as an expert in the art of foundry practice and core making, for the reason that said witness had not qualified as an expert in said field.

Dated: January 9th, 1943.

HACKLEY & HURSH ROY C. HACKLEY, JR. JACK E. HURSH

Attorneys for Appellants

Receipt of a copy of the foregoing "Statement of Points on Appeal" is hereby acknowledged this day of January, 1943.

Attorney for Appellees

[Endorsed]: Filed Jan. 9, 1943. Paul P. O'Brien, Clerk.